

• gigashot Toshiba HARD DISK CAMERA Owner's Manual GSC-R60/GSC-R30

Please read the owner's manual before using the R30/R60 camera.

WARNING: Handling the cord on this product or cords associated with accessories sold with this product, will expose you to lead, a chemical known to the State of California to cause [cancer, and] birth defects or other reproductive harm. *Wash hands after handling*.

Attention

For customers in the U.S.A.





FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is not guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

• Change the direction of the radio or TV antenna. Move the equipment or the radio or TV. For example, if the equipment is to the right of the TV, move it to the left of the TV.

Or, move the equipment farther away from the radio or TV.

- Plug the equipment into a different outlet. Don't plug your radio or TV into the same circuit as your equipment.
- Ensure that all expansion slots (on the back or side of the equipment) are covered. Also, ensure that all metal retaining brackets are tightly attached to the equipment.
- If these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

CAUTION

If you modify the camera in any way, without getting approval from Toshiba Corporation, your camera may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your right to use the modified camera.

Toshiba America Consumer Products, L.L.C.

82 Totowa Road Wayne, NJ 07470 Phone Number. (973) 628-8000

For customers in Canada CAUTION

This Class B digital apparatus complies with Canadian ICES-003.

Preface

Before Using Your Camera Accessories Safety Precautions Contents Handling Your Camera and Cradle Handling the AC Adapter Handling the Battery About the Built-in Hard Disk Drive About SD Memory Cards

Preface

Before Using Your Camera

Thank you for buying this Toshiba HARD DISK CAMERA.

This is a camera equipped with 1.8-inch 60GB or 30GB hard disk drive and a 10× zoom lens. It will shoot 2-megapixel still images as well as MPEG-2 format videos.

To ensure correct use of your hard disk camera, be sure to thoroughly read this Owner's Manual before you start using the camera.

Always keep this Owner's Manual close by after you have finished reading it.

The design, specifications, software and content of this Owner's Manual are subject to change without notice in the interest of product improvement.

The illustrations and screen displays in this manual are exaggerated and simplified for ease of viewing, so there can be slight differences between them and the actual product.

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The unauthorized recording, use, distribution, or revision of television programs, videotapes, DVDs and other materials, is prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and/or criminal liability.

Software and Owner's Manual

- Neither the entirety nor a portion of the accompanying Software or Owner's Manual can be transferred or reproduced without permission.
- The accompanying Software and Owner's Manual can be used with a single apparatus.
- Please note that we cannot be held liable for damages incurred by you or a third party as a result of using an apparatus with this Software and Owner's Manual.
- Computer screens in the Owner's Manual are given as an example. These may differ from your actual screen. We cannot be held liable for compensation for errors in description.
- In this manual, the micro indicates functions and settings that apply to video recording, while the icon is used to indicate functions and settings that apply to still image photography. Both still images and videos are referred to as "images".

Notice Regarding Data Erasure When Discarding or Transferring Rights to Your Camera

When formatting or deleting data from the camera or PC, only the file management information is changed. The data may still be present and could be recovered using commercially available data recovery software. This could allow for data which was erased to fall into the hands of an unintended party.

As a prevention, it is recommended to physically destroy the built-in hard disk drive or SD Memory Card, or to transfer rights or dispose of the camera or SD Memory Card after having completely erased any data on the built-in hard disk drive or SD Memory Card using commercially available data erasing software.

Please responsibly manage data on the built-in hard disk drive and SD Memory Card.

CAUTION

RISK OF EXPLOTION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO LOCAL ORDINANCES OR REGULATIONS.

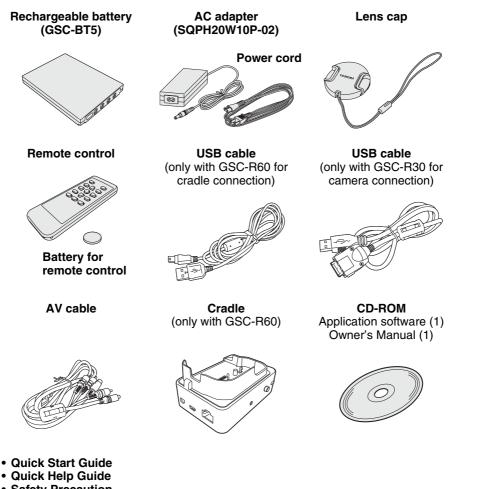
This hard disk camera supports Exif Print. Exif Print

This product supports PRINT Image Matching III. A faithful reflection of shooting conditions and shooting intentions are possible when printing with a PRINT Image Matching-supported printer and processing images with compatible software. Some features are not available with printers supporting versions earlier than PRINT Image Matching III.



Accessories

Make sure that you have all of the items below. If any item is missing, damaged or mismatched, please contact the Toshiba Customer Service Department [(800) 319-6684] (for U.S.A.) or Toshiba Customer Support Department [(800) 268-3404] (for Canada).



- Safety Precaution
- Product Registration Card
- STOP Need Help?

Safety Precautions

- Read these safety precautions carefully before using this product.
- These precautions provide valuable safety instructions that you must observe.
- The indications used for the precautions have the following meanings:

Graphic symbol definitions

Graphic Symbol	Meaning
\bigcirc	Indicates a prohibited action that must not be carried out. The actual prohibited action is indicated in the symbol or nearby graphically, or described in text.
	Indicates a necessary action that must be carried out. The actual necessary action is indicated in the symbol or nearby graphically, or described in text.

When using the product

Should you ever notice a strange odor, smoke, or excessive heat coming from the camera, remove the battery and AC adapter.

Continued use in this state might

Department or Toshiba Customer

If foreign objects or water have

Continued use in this state might

Consult the Toshiba Customer

Service Department or Toshiba Customer Support Department.

If the camera has fallen or its

case has been damaged, turn

the power OFF and remove the battery and AC adapter.

Continued use in this state might

cause fire or electric shock. Injury

entered the camera, turn the

power OFF and remove the

battery and AC adapter.

cause fire or electric shock.

cause fire, electric shock, or

burns. Take care not to burn

Toshiba Customer Service

Support Department.

yourself if the battery gets hot. For details on repair, consult the



Do not use the camera in areas near water.

WARNING

This might cause fire or electric shock.

Take special care during rain, snow, on the beach, or near the shore.

Do not use the camera in the bath or shower.

This might cause fire or electric shock.

Do not disassemble, modify, or repair the camera.

This might cause fire or electric shock.

For repair or internal inspection, ask the Toshiba Customer Service Department or Toshiba Customer Support Department.

Do not touch power cables, TV cables, or LAN/USB cables during a thunderstorm.

This might cause electric shock.

Do not use the camera while walking, driving, or riding a motorcycle.



Preface











This might cause you to fall over or result in a traffic accident.

may occur from handling the damaged case. Consult the Toshiba Customer Service Department or Toshiba Customer Support Department.

Do not allow metallic objects or flammable foreign matter inside the camera.

This might cause fire or electric shock.

Do not insert or drop foreign objects in the battery/SD card slot, terminals, or other holes or openings.



Turn off power and do not use the camera where its use is restricted, such as in an airplane or hospital.

This might affect flight or medical equipment resulting in accident. Use during airplane take-off/ landing is prohibited by law. For use in a hospital, consult hospital staff.

Do not use the camera in humid, steamy, smoky, or dusty places.



This might cause fire or electric shock.

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.



This might adversely affect the case or the internal parts, resulting in fire.

Do not play the supplied CD-ROM with a music CD player or a similar device.



This might damage the headphone or speaker, and/or may damage your ears.

Do not drop or subject the camera to strong impact.

This might cause fire, electric shock, or malfunction.

Before moving the camera, disconnect the cables.

Neglecting this might damage the cables, resulting in fire or electric shock.





Do not place the camera on inclined or unstable surfaces.

This might cause the camera to fall or tilt over, causing injury or malfunction.

Do not wrap or place the camera in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a wellventilated place.

Do not swing the camera while walking.

If you hold the grip belt and swing the camera, the camera might come into contact to other people or any object, resulting in injury or malfunction.

Before cleaning the camera, remove the battery and AC adapter.

Neglecting this might cause electric shock.

Do not fire the flash near the eyes.

This might cause temporary damage to the eyesight.

Do not subject the LCD monitor to impact.

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water. If the internal fluid has entered your eyes, consult a physician to receive treatment.









About the AC adapter

WARNING

Use the AC adapter only with the indicated power supply voltage. Use with any other power supply

Do not disassemble, modify, or

This might cause fire or electric

Occasionally remove the plug

from the outlet and clean the

the prongs are connected if

dust or dirt has adhered.

prongs and the surface where

voltage might cause fire or

repair the AC adapter.

electric shock.

shock.



Do not place blankets over the AC adapter connected with the power source or place the adapter near a heater or on an electric (warm) carpet.



This might cause fire or malfunction.

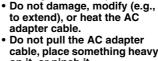
Observe the following when handling the AC adapter cord.

- to extend), or heat the AC adapter cable.
- Do not pull the AC adapter cable, place something heavy on it, or pinch it.
- · Do not bend, twist, or bundle the AC adapter cable with an excessive force.

shock.



Preface



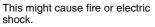


These might cause fire or electric



A loss of plug insulation might cause fire.

Do not bring metal into contact with the connection points of the AC adapter when its plug is in an outlet.





Do not connect or disconnect the AC adapter plug with a wet hand.

This might cause electric shock.

Do not remove the AC adapter plug from a wall outlet by pulling the actual cable.



This might damage the cable or plug, resulting in fire or electric shock. Make sure to hold the plug when removing it.

Use only the specified AC adapter (SQPH20W10P-02) and power cable.



Use of an AC adapter other than specified might cause fire or malfunction.

About the battery

If you plan not to use the camera for a long period of time, remove the AC adapter plug from a wall outlet for safety.

Malfunction of the camera, if it happens, might result in fire.

Do not use the AC adapter for any use other than with this camera.

This might cause fire or malfunction.

Firmly insert the AC adapter plug into a wall outlet.

Neglecting this might cause fire or electric shock.



Observe the following when handling the battery

- Do not disassemble/modify
- Do not heat
- Do not throw in fire or water
- · Do not hammer, step on, drop, or subject to strong impact
- · Do not use in applications other than specified
- Do not recharge in any manner other than specified
- Do not connect the battery electrodes (+ and terminals) with wire or other metallic objects

· Do not carry or store together with metallic necklaces or pins

This might cause the battery to rupture, ignite or heat up, resulting in fire or serious injury.



Use only the specified battery (GSC-BT5).

Use of a battery other than specified might cause fire, damage, or malfunction.

Do not leave battery within the reach of small children.

Swallowing the battery or the remote controller's coin-sized lithium battery might cause poisoning. If you accidentally swallow the battery, contact a doctor immediately.



If fluid leaks from the battery and comes into contact your eyes, immediately wash your eyes with clean, running water, and ask a physician for treatment.

Leaving your eyes in this condition might cause eye damage.



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Do not remove the battery immediately after the camera has been used for a long time.

The battery becomes hot during use.

Touching a hot battery might cause burns.

Do not insert unusable battery or discharged battery.

Otherwise, the battery may rupture, ignite or heat up, resulting in fire, burns, or injury.



Before storing the battery, attach insulating tape to b

attach insulating tape to both the plus (+) and (–) electrodes.

Storing battery as it is might cause the battery to leak fluid, heat up or rupture, resulting in burns or injury.

Insert the battery carefully making sure that its polarities (marked by + and –) are facing the correct way.

Inserting the battery with its polarities facing the wrong way might cause fire or injury, or damage to the surrounding area due to the battery rupturing or leaking.





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Handling Your Camera and Cradle

Before using the camera, carefully read and observe the "Safety Precautions" (\square p.8) and the notes described below:

Avoid Using or Storing the Camera in the Following Places

- · Places subject to humidity, dust, and dirt
- · Places subject to direct sunlight
- Places subject to high or low temperature
- · Places filled with highly flammable gas
- · Places near gasoline, benzene, or paint thinner
- · Places subject to strong vibration
- · Places subject to smoke or steam
- Places subject to strong magnetic fields (near electric motors, transformers, magnets, etc.)
- Places contacting chemicals (such as pesticides), rubber or vinyl products for a long period of time

Avoid Subjecting the Camera to Vibrations or Impacts

If the camera is subjected to strong vibrations, not only will the camera become damaged, there might also be a loss of hard disk drive data.

Prevent the Hard Disk Camera from Coming into Contact with Sand

If the camera comes into contact with sand, not only will the camera become damaged, it will also no longer be repairable.

Take special care when using the hard disk camera near seaside, sandy areas or places where sand dust is likely to occur.

Pay Attention to Condensation

Sudden Changes in temperature, such as when you move the camera or cradle from a cold location to a warm one, water droplets (condensation) may form on the inside of the camera or on the lens.

When this occurs, turn the power OFF, and wait an hour before using the camera. If condensation forms on the SD Memory Card, remove the SD Memory Card, wipe off any condensation and wait a short time before using it again.

When Cleaning the Camera

- To prevent the lens and the surface of the LCD monitor from being scratched, blow off any dust from them with a blower brush and lightly wipe with a soft dry cloth.
- Clean the body of the camera with a soft dry cloth. Do not use volatile liquids such as paint thinner, benzene, or other harsh chemicals because these may cause deformation or remove the coating.

Be Careful of Magnetic Fields

- Please do not allow items that are easily affected by magnetic fields to come close to the speaker of the camera; these include credit and cash cards, magnetic passes, computer diskettes, etc. Doing so could result in data loss and render the item unusable.
- Do not allow objects such as magnets or speakers which produce magnetic fields to come close to the camera. This might cause damage, malfunctioning, or loss of memory contents.

Be Careful of Electromagnetic Waves

Do not use the camera near towers or high-voltage lines. This might cause poor video or audio quality.

Handling the AC Adapter

Be sure to use only the specified AC adapter (SQPH20W10P-02). Using a different AC adapter might cause the camera to malfunction.

Before using the AC adapter, carefully read and observe the "Safety Precautions" (\square p.8) and the notes described below:

- Do not allow the connectors on the AC adapter to come into contact any other metal object because this might cause a short circuit.
- To connect the AC adapter, fully insert the DC plug on the AC adapter into the DC IN 10V terminal on the camera or the cradle (comes with GSC-R60).
- When disconnecting the AC adapter cable or DC plug, turn the power OFF, then disconnect while holding its plug. Do not disconnect by pulling the actual cable.
- Do not drop the AC adapter or subject it to strong impact.
- Do not use the AC adapter in very hot and humid places.
- Do not insert the DC plug on the AC adapter while the battery is being used. Turn the power OFF first.
- The AC adapter is for indoor use only.
- Do not connect the supplied AC adapter to a device other than this camera.
- The AC adapter may sometimes become warm during use. This is normal.
- · Buzzing noises may come form inside the camera. This is normal.
- Do not use the AC adapter near a radio because it could interfere with the radio.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from the memory. If this happens, reset the date.

Specifications

AC adapter (SQPH20W10P-02)

(ear neoriter of)							
Input	:	100 V to 240 V AC, 50/60 Hz					
Rated output	:	10 V DC, 2.0 A					
Operating temperature	э:	32°F (0°C) to +104°F (+40°C)					
Storage temperature	:	–40°F (–40°C) to +140°F (+60°C)					
Dimensions	:	1.9 inches \times 1.0 inches \times 3.9 inches (49.5 mm \times 25.5 mm					
		\times 99.5 mm) (W \times H \times D)					
Weight	:	Approx. 7.1 oz (200 g)					

А МЕМО

• Use the power supply indicated on the supplied AC cable. When using power supply other than the displayed voltage in other countries/region, please purchase the AC cable that applies to the standard of the country/region.

Handling the Battery

This camera uses a special rechargeable lithium-ion battery. It is referred to simply as "battery" in this manual. Do not use a different battery.

When you use the battery, carefully read and observe the "Safety Precautions" (\Box) p.8) and the notes described below.

* The battery included with the camera does not come fully charged. Be sure to fully charge the battery before using the camera for the first time.

About Battery Use

- The battery gradually discharges even when not used. Charge the battery one or two days before use.
- To maximize the battery life, switch the camera OFF as often as possible when it is not being used.
- In cold locations, the length of time the camera is operable decreases even with a fully charged battery.

Take along a spare fully charged battery.

- Always keep the terminals clean.
- If the battery is used for a long time, the battery itself will become warm. This is normal and not a malfunction.
- The battery has a limited service life. The length of service life varies depending on product use and user settings. At normal temperatures (77°F (25°C)), the battery can be recharged approximately 300 times. If you use the battery beyond its service life, you may notice that battery life becomes remarkably shorter, even if the battery is fully charged. If you notice that battery life has become remarkably shorter, even when the battery pack is fully charged, it is recommended that you replace the battery pack with battery model number GSC-BT5.

When not Using the Battery for a Long Time

- When the battery is not in use for a lengthy period of time, be sure to remove it from the camera body. If the battery is left attached to the camera body or battery charger, a minute current will flow even if the power is turned OFF. This will result in over discharge and the battery may no longer be useable.
- Store the battery in a cool place. We recommend a dry place with a surrounding temperature of 59°F (15°C) to 77°F (25°C). Avoid storing the battery in extremely hot or cold places.

Charging the Battery

- Charging is done with the camera body. You must not charge the battery with any other charger.
- When you use the battery for the first time or when the battery has not been used for a long time, be sure to charge the battery before use.
- Use only the specified AC adapter (SQPH20W10P-02).
- This battery does not need to be fully discharged or exhausted before being charged.
- The battery may feel warm after it has been charged or immediately after being used. This is normal and not a malfunction.
- The battery can be charged at temperatures between about +50°F (+10°C) and +86°F (+30°C) to obtain maximum battery performance.
- Do not recharge a fully charged battery.

Getting the Most Out of Your Battery

- Even when the camera is turned off, a very small current continues to flow. If you do not intend to use the camera for a long period, you should take the battery out of the camera. If the battery is left out of the camera for approximately 48 hours, the date, time and other camera settings may revert to the default values. Reset these settings before using the camera.
- Battery performance that has been impaired by low temperatures will recover when the camera is returned to room temperature (77°F (25°C)).

Specifications

Lithium-ion battery (GSC-BT5)							
Nominal voltage	: 7.4 V						
Nominal capacity	: 1200 mAh						
Operating temperature	: +32°F (0°C) to +104°F (+40°C)						
Dimensions	: 2.1 inches \times 2.9 inches \times 0.3 inches (53 mm \times 73 mm \times 8 mm)						
	$(W \times H \times D)$						
Weight	: Approx. 2.0 oz (58 g)						

About the Built-in Hard Disk Drive

This camera has its own built-in hard disk drive. Hard disk drive will also be referred to as "HDD" throughout this Owner's Manual. The hard disk drive is a precision component that is easily affected by impacts, vibration and environmental variations such as changes in temperature. Note the following when using the camera:

- Avoid striking, dropping, vibrating or waving the camera around while it is operating or while it is idle. Doing so could result in camera damage, malfunctions or loss of stored data.
- Do not turn the camera off while it is writing data to or reading data from the hard disk drive. Doing so could result in camera damage, malfunctions or loss of stored data.
- Before formatting the hard disk drive, check the data stored on the hard disk drive carefully.

Formatting the hard disk drive completely erases all the data saved on the hard disk drive. Data erased during formatting cannot be recovered.

- You should back up the data saved on the hard disk drive frequently in case of damage to the hard disk drive or any modification or erasing of the data.
 Toshiba accepts no liability whatsoever for any loss or corruption of data stored on the hard disk drive.
- It is recommended that you make a trial recording before recording content that is important to you. Play back the trial recording to ensure that the video and audio were recorded properly.

Using the Hard Disk Drive

• It is recommended that you periodically save the files on the hard disk drive to a PC, CD or DVD and format the hard disk drive.

The hard disk drive is a high precision component and there is always a risk of partial damage to the disk depending on how it is used. At worst, it may become impossible to read or write data to the hard disk drive.

Accordingly, the hard disk drive should not be regarded as a permanent storage location for recorded files, but rather as a temporary storage location for viewing images before they are to be erased or copied for permanent storage onto a PC, DVD recorder with DVR, CD or DVD, etc.

• When files are repeatedly recorded onto the hard disk drive and erased, file distribution on the hard disk drive becomes fragmented and the amount of continuous free space decreases.

When this occurs, files that cannot be saved into a single block of free space are split into 2 or more parts during saving.

Increasing numbers of split files will slow down normal camera operation and may in some cases prevent the allocation of sufficient free space to save new files even after stored images are erased.

In this situation, copy the files on the hard disk drive onto a PC, DVD recorder with DVR, CD or DVD, etc. and then format the built-in hard disk drive.

About SD Memory Cards

SD Memory Cards (sold separately) are referred to in this manual as "SD cards".



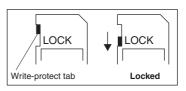
Note the information given below on handling SD cards.

Notes on Using SD Cards

- SD cards contain built-in nonvolatile semiconductor memory. Recorded data is not generally corrupted (or erased) during normal use, but misuse can result in data corruption (loss). Toshiba accepts no liability whatsoever for any damages or loss arising from the corruption (loss) of data stored on SD cards, regardless of the details or cause.
- Because part of the memory on an SD card is used as the system area, the actual available memory capacity is smaller than stated card capacity.
- Always format SD cards in the camera. Formatting an SD card on another device (such as a PC) can cause problems that may prevent data being written to or read from the card.
- You should always make backup copies of important data.
- SD cards have a limited operating life. If you are no longer able to record or erase images on an SD card that has been used for a long period, you should purchase a new SD card.
- Take care that young children do not accidentally swallow an SD card as this could cause choking.
- This camera conforms to SD standard version 1.01.

Write-protection

To prevent important data from being accidentally erased, you can lock (write-protect) an SD card by moving the write-protect tab on the side of the card to the LOCK position. To record, edit or erase data on the card, return the tab to the unlocked position.



IMPORTANT

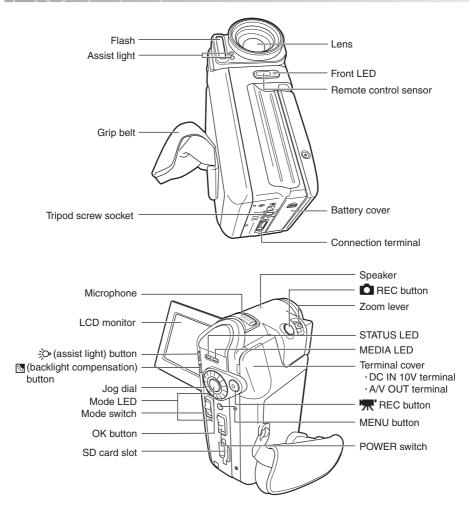
- The use of high-speed SD cards (10MB/sec or faster) is recommended. Using SD cards with slower data transfer rates may prevent normal video recording and playback.
- · Not all third-party SD cards are guaranteed to work with this camera.

Preparation

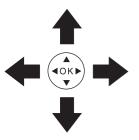
Component Names Inserting and Removing the Battery Charging Inserting and Removing SD Cards Turning the Camera On and Off Setting the Date and Time Creating Albums Using the LCD Monitor About the Remote Control Quick Reference Guide

Component Names

Camera



Using the OK Button



Pressing directly down on the OK button confirms the selected item, but you can also move it up \blacktriangle , down \blacktriangledown , left \blacklozenge and right \blacktriangleright .

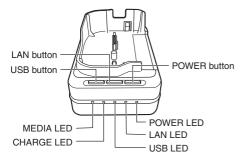
Use the OK button in recording mode to adjust the focus, select the scene, set the flash and exposure bias, and to select items from menus.

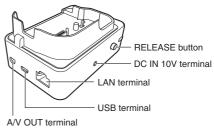
In this manual, the " \blacktriangle , \bigtriangledown , \blacktriangleright , \blacktriangleleft " symbols are used to indicate the direction in which the OK button should be moved.

			STATUS LED					
Color	Mode LED	Green	Red		Orange	LED	Front LED	
Status	Lit	Lit	Lit Blinking		Blinking	Lit	Lit	Blinking
At power OFF	-	Charging completed	Charging Charging error		-	-	-	-
During shooting	Recording mode	-	_ Hardware fault		Preparing to shoot	Media access	Recording	Self-timer in use
During playback	Playback mode	-	_ Hardware fault		-	Media access	I	-
In LAN mode	-	Mounted	- Hardware fault		Preparing to connect	Media access	-	-
In USB mode	-	Mounted	-	Hardware fault	Cable not connected	Media access	-	-

Camera LEDs

Cradle* (only with GSC-R60)





Cradle LEDs*

LED Mode	POWER	LAN	USB		CHARGE		
Status	Lit	Lit	Lit	Off	Lit	Blinking	Lit
At power OFF	-	_	-	Charging completed	Charging	Charging error	-
In Playback/ Recording mode	0	_	-	-	-	-	Media access
In LAN mode	0	0	-	-	-	-	Media access
In USB mode	0	_	0	_	_	_	Media access

* The cradle only operates when the AC adapter is connected.

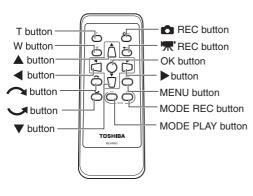
The cradle LEDs also only operate when the AC adapter is connected.

Cradle Operation*

Button				LCD monitor closed			
	POWER	LAN	USB	LCD-linked	LCD-linked		
Status				power on	power off		
At power OFF	Turned on in Playback mode	Turned on in LAN mode	Turned on in USB mode	_	_		
In Playback/ Recording mode	Power off	Switched to LAN mode	Switched to USB mode	Power off	LCD monitor off		
In LAN mode	Power off	_	Switched to USB mode	Power off	LCD monitor off		
In USB mode	Power off	Switched to LAN mode	_	Power off	LCD monitor off		

* The cradle only operates when the AC adapter is connected.

Remote Control



Buttons/levers					
Camera	Remote control				
POWER	-				
Mode switch 🗅 🛒	MODE REC				
Mode switch D	MODE PLAY				
🐙 REC	🛒 REC				
REC half-pressed	_				
REC fully pressed	C REC				
Zoom lever T direction	Т				
Zoom lever W direction	W				
MENU	MENU				
OK	OK				
OK button 🔺					
OK button ▼	•				
OK button ◀					
OK button 🕨					
Jog dial left	5				
Jog dial right	ζ				

Inserting and Removing the Battery

Check that the camera is turned off.

Inserting the Battery

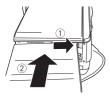
Open the battery cover.



Slide the battery cover lock on the bottom of the camera in the direction of the arrow (1) and open the battery cover in the direction of the arrow (2).

-Battery lock lever

2 Use the battery to push the battery lock lever in the direction of the arrow ① as you slide the battery in ②.



Insert the battery as shown in the figure with the label facing up. Insert the battery firmly as far as it will go, and check that the battery is secured by the battery lock lever.

Close the battery cover.



Slide the battery cover in the direction of the arrow to close it.

Check that the battery cover is securely closed.



IMPORTANT

• If you load the battery when the camera has not been correctly shut down, the camera may not operate correctly. In this event, turn the camera off and on again.

Removing the Battery

1 Open the battery cover.

Push the battery lock lever in the direction of the arrow and remove the battery.



When you push the battery lock lever, the battery pops up slightly and comes out.



Close the battery cover.



IMPORTANT

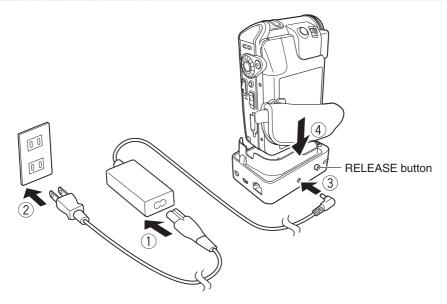
- Always turn the camera off before removing the battery. Removing the battery while the camera is still turned on may damage the camera or corrupt important data. It may also cause the camera settings to revert to the defaults that were set when you purchased the camera. If this occurs, specify your preferred settings again.
- When removing the battery, take care not to drop the camera or battery.
- If you open the battery cover when an AC adapter is not connected, the power will automatically go off.

Charging

You should charge the battery the first time you use the camera and whenever the battery is low. Charging the battery fully takes around 2.5 hours. Time needed for recharging increases or decreases depending on factors including the surrounding temperature.

Check that the battery is loaded in the camera and that the camera is turned off.

Charging with the Camera in the Cradle



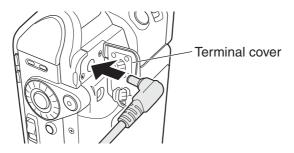
Connect the components in the sequence 1 to 4 above.

When battery charging begins, the CHARGE LED on the cradle lights orange and the STATUS LED on the camera lights red.

When charging is completed, the CHARGE LED on the cradle turns off and the STATUS LED on the camera turns green. Press the RELEASE button on the cradle and remove the camera.

If there is a fault during charging, the STATUS LED flashes red.

Charging in the Camera



1 Open the terminal cover on the camera.

2 Connect the power cord and AC adapter and then plug the power cord into the mains power socket.

Plug the DC plug on the AC adapter into the DC IN 10V socket on the camera.

When battery charging begins, the STATUS LED on the camera lights red. When charging is completed, the STATUS LED on the camera turns green.



IMPORTANT

- The battery is charged while in the camera. Never attempt to charge the battery with another charger.
- If a problem arises during charging, unplug the power cord from the mains power outlet, remove the battery from the camera and contact Toshiba Customer Service Department or Toshiba Customer Support Department. Be careful when removing the battery as it can become hot.
- If the camera is charged in conditions where it becomes hot (in direct sunlight, etc.), the heat in the camera may trigger a sensor in the camera that prevents charging from beginning immediately. If this occurs, allow the camera to cool fully before charging.

МЕМО

• To get the best possible performance from your battery, charge it when the ambient temperature is between 50°F (10°C) and 86°F (30°C).

Battery Level Display

When you turn the camera on, the level of charge in the battery appears on the LCD monitor.

Display	([]]]	ſ		Ðz	
Meaning	Fully charged	Low charge	Almost out of charge	Running on the AC adapter	

Camera Operation Time Using the Battery

The length of time for which the camera will operate on battery power varies considerably depending on a number of factors, including the battery's storage time, the temperature of the battery and camera, and the shooting conditions (whether the flash and zoom are used, etc.). Dirt and/or other debris on the positive (+) and/or negative (-) battery terminals, or on the corresponding terminals in the camera, can obstruct current flow and the camera to incorrectly indicate that the battery is not charged. When loading and removing the battery, take care not to touch the battery or camera terminals. If the battery and/or camera terminals are dirty, clean them with a clean, dry cloth.

The available video recording times when a new battery is fully charged are shown below.

Continuous video recording

Conditions: Recording a video continuously without using the zoom at a temperature of 73°F (23°C)

Shooting time: Approx. 110 min.

Actual time video recording

Conditions: Recording a video using the zoom and power ON/OFF at a temperature of 73°F (23°C)

Shooting time: Approx. 60 min.

* The figures above relating to video recording time are for reference purposes only and are not guaranteed.

Inserting and Removing SD Cards

Turn the camera off before inserting or removing an SD card (sold separately).

Inserting an SD Card

1 Insert the SD card into the SD slot, ensuring that the card is facing in the right direction (as shown below).



With the notch facing upwards (towards the lens), push the card firmly all the way into the slot.

Check that the SD card is pushed fully and securely into the slot.

To have images you shoot recorded on an SD card, you should insert an SD card for that purpose before taking images.

See "Selecting an SD Card as the Save Location and Creating Albums" rightarrow p.74.

Removing an SD Card

Push the card into the slot once so that it springs out slightly. Then slowly pull it out of the slot.



IMPORTANT

- Never remove an SD card while images are being recorded (while the MEDIA LED is lit). Doing so could corrupt the data on the SD card or damage the SD card itself.
- The first time you use an SD card, or when using an SD card that has been used on another device, always format the card in the camera before recording.
- This camera does not support the MultiMediaCard[™] format.

Turning the Camera On and Off

Load the battery.

See "Inserting and Removing the Battery" D.28.

Turning the Camera On and Off by Opening and Closing the LCD Monitor



Opening the LCD monitor turns the camera on and closing the LCD monitor turns the camera off. The first time you use the camera, or when the battery has been left out of the camera for a long period, the screen for

setting the date and time appears.

Set the date and time.

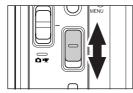
See "Setting the Date and Time" \square p.35.



MEMO

- If [LCD-LINKED POWER] is set to [OFF], opening and closing the LCD monitor does not turn the camera on and off. Slide the POWER switch to turn the camera on and off.
- Use the mode LED to check whether the camera is turned on when the LCD monitor is closed.

Turning the Camera On and Off by Sliding the POWER Switch



Sliding the POWER switch turns the camera on and off.

MEMO

- If you load the battery or connect the AC adapter without correctly shutting down the camera first, the camera may not operate correctly. If this occurs, turn the camera off and on again.
- To forcibly turn off the camera when there is a problem such as a system error, slide the POWER switch across and hold it in place for at least 5 seconds. Note that this may result in the loss of any files that are being created. Settings such as the date and time may also revert to their default values. In this event, reset the settings before using the camera again.



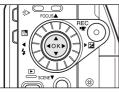
IMPORTANT

• If you open the battery cover when an AC adapter is not connected, the power will automatically go off.

Setting the Date and Time

The first time you use the camera, or when the battery has been left out of the camera for a long period, the screen for setting the date and time automatically appears. Use this screen to set the date and time. Note that you cannot set seconds.

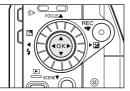
Move the OK button to ◀ or ► to select a setting and then use the jog dial to select a value.





After selecting the desired setting, you can also move the OK button to \blacktriangle or \blacktriangledown to set the value.

2 Move the OK button to ◀ or ► to select [OK] and then press the OK button.





This sets the date and time. The first time you use the camera, the display switches to the create album screen. Use this screen to create your albums.

See "Creating Albums" ⊯ p.36.

If you have already created albums, the camera switches to recording mode. To cancel out of date and time setting, select [CANCEL] and press the OK button.



MEMO

- The order in which the date appears depends on the selected format. The available formats are [MM/DD/YYYY], [YYYY.MM.DD] and [DD/MM/YYYY].
- When you finish setting the date and time after selecting [DATE AND TIME SETTING] in the setup menu, the setup menu reappears.

Creating Albums

When there are no created albums on the disk drive (the first time you use the camera or after you format the hard disk drive (\square p.145), etc.), the create album screen is automatically displayed.



Use the jog dial to select an album type.





Press the OK button.

An album is created and the camera switches to recording mode.



MEMO

• You cannot select album types on an SD card.

Album Types*

The available album types are shown below.

Icon	Name	lcon	Name	lcon	Name	lcon	Name
200	ART	\sum	MAIL	Solution	GIFT	0	TRASH
-a	DRIVE	Ń	PARTY	Ē	TRAVEL		MUSIC
3	SPORTS	K)	BEACH		LANDSCAPE	i T	BUSINESS
Ser.	MEMO		PC	din di	BIRTHDAY		WEDDING
11	CEREMONY		BABY	N.	KIDS	ŝ	FAMILY1
-	FAMILY2	Star Star	FAMILY3		PET	9 6	SPRING
	SUMMER	*	AUTUMN		WINTER	•]•	HAPPY
÷(SAD		LOVE	No.	LUCKY		PARK

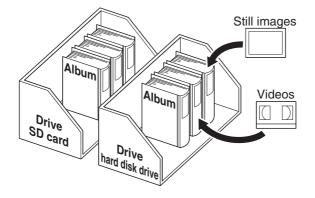
* Toshiba reserves the right to add or delete album types without prior notice.

Albums and Drives

To save your recorded images, you must have albums. You can choose the type of album based on the recording date or on the type of shot (travel, pets, etc.).

Drives are where your albums are kept.

On this camera, albums are kept on the hard disk drive and on SD cards.



Using the LCD Monitor

The LCD monitor can be adjusted to a variety of positions.

Off position



Normal position

- When the camera is turned off
- When the camera is on standby for photography or playback
- When you are charging the camera
- For photography or playback



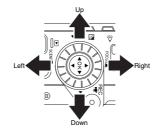
Backward-facing position*1



Viewer position*2



- To look at the monitor when recording images of yourself
- *1: In the backward-facing position, the image on the LCD monitor is reversed left to right, like the image in a mirror, but the recorded image is the same as the actual subject.
- For playback



*2: When the LCD monitor is in the viewer position and the camera is in playback mode or the menu is displayed, the up, down, left and right positions on the OK button change as shown above. Note that they do not change in recording mode.

About the Remote Control

The remote control allows you to photograph or play images and videos from a distance.

Effective Range



The following limitations apply to the range of the remote control:

- Distance : Up to roughly 12 feet (4 meters) from the camera
- Angle
 - : Within an angle of 25° up, down, left or right relative to the remote control sensor on the camera

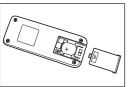
The above applies to indoor use. When the remote control is used outdoors or when a oright light is shining on the remote control sensor, you may be unable to operate the camera from the remote control even within the effective range as shown above.



IMPORTANT

- Do not drop the remote control or subject it to severe vibration.
- Do not spill water on the remote control.
- Do not attempt to disassemble the remote control.
- Do not leave the remote control in hot or humid locations.

Loading the Battery



Use the bundled coin-shaped CR2025 lithium battery. Slide open the battery cover in the lower section of the rear side of the remote control. Insert the battery with the plus symbol (+) facing upwards and then close the battery cover.

МЕМО

- Replace the battery if the remote control response becomes sluggish or there is no response at all.
- Do not use a battery that has passed its use-by date.
- The remote control battery cannot be recharged.
- If fluid leaks from the battery, use a dry cloth to thoroughly clean off any fluid on the remote control before inserting a new battery.

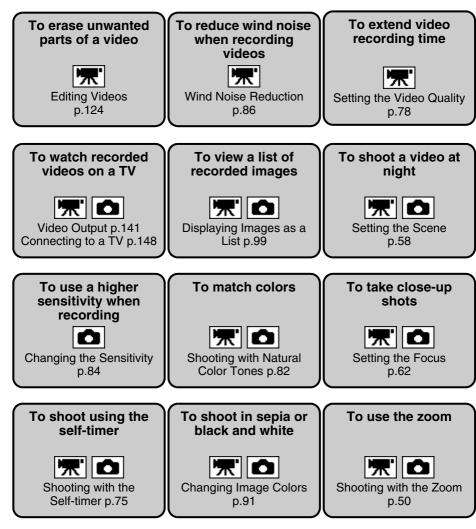


(M)

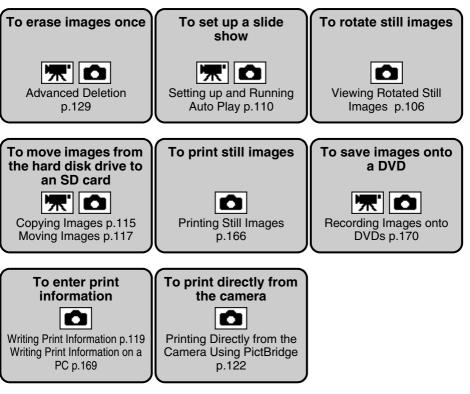
IMPORTANT

- Only use the designated type of battery.
- Take care not to reverse the (+) and (-) sides of the battery.
- Do not attempt to charge, disassemble or short-circuit the battery and do not throw it into a fire.
- Do not leave a fully depleted battery in the remote control.

Quick Reference Guide



- 🛒: Things you can do with videos
- : Things you can do with still images



🔭 : Things you can do with videos

Things you can do with still images

Shooting Video

Before You Shoot Shooting Video Taking Still Images Shooting with the Zoom Playback Erasing Images (Erase one Image)

Before You Shoot

Holding the Camera

When shooting, hold the camera firmly, taking care not to block the lens or flash with your ingers.

When moving the camera while shooting a video, avoid sudden or extreme movements. For example, when you are panning the camera left or right, lock your wrists so that camera does not move up and down and slowly turn your body as you shoot.

Correct (one-handed)



Correct (two-handed)



When holding the camera one-handed, brace your elbow firmly against the side of your pody.

For a more stable grip, hold the LCD monitor with your left hand.

Incorrect



Take care not to block the lens or flash with your fingers.

Adjusting the Grip Belt

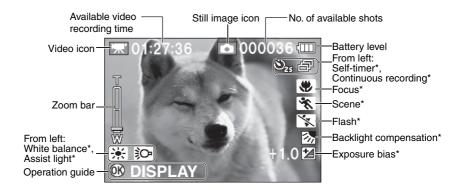


You can adjust the grip belt to ensure that you maintain a firm grip on the camera.

Release the Velcro tape on the grip belt and adjust the belt length.

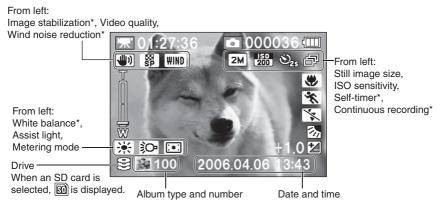
After adjusting the length, refasten the Velcro tape firmly.

LCD Display When in Recording Mode (Normal Display)



LCD Display When in Recording Mode (Information Display)

Use the OK button to switch between normal display and information display.



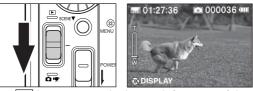
* Icons displayed when the camera settings are not Auto (Scene, Flash and White balance), Auto focus (Focus), ±0 (Exposure bias), Off (Self-timer, Wind noise reduction, Image stabilization, Assist light and Backlight compensation) and 1 shot (Continuous recording).

Shooting Video

This section describes how to shoot a video. Sound is also recorded in the video.

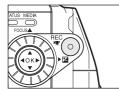
Check that the battery is loaded in the camera and that you have removed the lens cap. Then open the LCD monitor to turn the camera on. Use the grip belt to avoid dropping the camera.

1 Slide the mode switch in the direction of the arrow to select recording mode.



The \boxed{m} icon appears in the top-left corner of the screen during video recording. If the LCD monitor is too bright or too dark, adjust the monitor brightness. See "Changing the LCD Brightness" $\textcircled{\baselinethindown}$ p.96.

Press the 🔭 REC button.



The camera starts shooting the video. Press the \ REC button again to end video recording. The front LED lights during video recording. To pause while you are shooting a video, set REC PAUSE to On. See "Pausing Video Recording" ⇒ p.95.

Pausing Video Recording

Using the "REC PAUSE" function allows you to pause during recording. See "Pausing Video Recording" \Rightarrow p.95.

When you restart recording, a chapter (see "Glossary" rightarrow p.197) is inserted. Inserting chapters allows you to select different starting points during video playback (rightarrow p.103).



IMPORTANT

- Do not disconnect the AC adaptor, open or close the battery cover, or remove the battery or SD card while the camera is in operation. Doing so may damage the camera, hard disk drive and/or SD card, and may corrupt the data stored on the hard disk drive or SD card.
- Avoid low temperature-burns when using the camera for long periods of time. The camera can get hot, especially when used in hot environments. For long periods of shooting, the use of a tripod is recommended.

МЕМО

• The maximum size for a single video file is 4GB*. When the file size approaches 4GB during video recording, a countdown begins on the screen 10 minutes before the limit is reached.

If you just continue shooting, the camera automatically stops shooting the video, creates a video file and then resumes shooting.

The size of the created video file will be slightly less than 4GB.

- If you set the LCD monitor in the backward-facing position, the image is displayed reversed left to right, like the image in a mirror. However, using any of the camera buttons or keys temporarily changes the image back to normal.
- You can insert up to 99 chapters in each video file.
- Video recording uses up battery charge more quickly than still image photography.
- The lens operation noise emitted while you are using the zoom lever may also be recorded in the video.
- *1GB = 1 billion bytes.

Button Operations during Video Recording

REC PAUSE OFF	REC PAUSE ON	
During recording	During recording	While paused
Ends recording	Pauses recording	Restarts recording and inserts a chapter
_	-	End recording
_	-	AF/AE lock
	Takes a still image	
Manual focus		
-		
-		
Sets the exposure		
Zooms in		
Zooms out		
Turns change LCD brightness on/off*		Displays the recording menu
Backlight compensation on/off		
Assist light on/off		
	During recording Ends recording	During recording During recording Ends recording Pauses recording - - - - - - Takes a still image Manual focus - - Sets the exposure - Zooms in Zooms out Turns change LCD brightness on/off* Backlight compensation or

For information on changing the LCD brightness during video recording, see "Changing the LCD Brightness" (\square p.96).

LCD Monitor Display during Video Recording

The text, numbers and icons displayed differ depending on the selected camera settings.

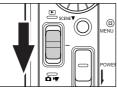


As the size of a video file nears 4GB, the elapsed shooting time will turn to 10:00:00 and begin counting down.

Taking Still Images

The camera automatically controls the exposure (the combination of shutter speed and aperture size) to suit the photography conditions.

Slide the mode switch in the direction of the arrow to select recording mode.





2 Looking at the LCD monitor, compose the shot.

If the LCD monitor is too bright or too dark, adjust the monitor brightness. See "Changing the LCD Brightness" D p.96.

Press the 💼 REC button down halfway (1) and then press it down fully (2).



Pressing the button down halfway automatically sets the focus and exposure. The ISO sensitivity, shutter speed and aperture are displayed at that point. Continue to press the button down fully to take the picture. Note that camera movement when you press the shutter button down fully will cause blurring in the photographed image.

After shooting, the front LED lights.

When the still image size is set to [2M], pressing the D REC button down halfway widens the area that can be photographed and the screen display changes accordingly. When this occurs, the center of the image may shift. If you release the

REC button or press the button down fully to take the picture and then do not use the camera controls for around 3 seconds, the screen display reverts to its original area.



MEMO

- In the interval between the
 REC button being pressed down halfway and the focus being set, the LCD monitor image may turn dark.
- · Flash charging may take a few seconds. During flash charging, the STATUS LED flashes orange and you cannot take the picture.
- When the subject is dark, you can fire the assist light for focusing by pressing the REC button down halfway.
 - See "Setting the LEDs" D.138.
- The assist light can be kept normally on by pressing the assist light button. See "Photography Using the Assist Light" D p.66.

Focusing

You can determine whether an image is focused from the color of the focus area frame that appears when you press the
REC button down halfway. The frame is green if the mage is focused and red if it is not.

If the exposure is incorrect, the ISO sensitivity, shutter speed and aperture are displayed n red.

When the Camera Will not Focus...

Set the [AF MODE] to [CENTER] (□> p.90).
 Next, move the camera so that the subject you want to photograph is in the center of the shot. Then, holding down halfway the ■ REC button so that the focus is set, recompose the shot as desired and press the ■ REC button down fully.







- This camera may have difficulty auto focusing and be unable to focus due to the following conditions.
 - Where there are also objects behind or in front of the subject (as with an animal behind bars or a person standing in front of a tree)
 - · Very glossy subjects such as a mirror or car body
 - · Objects with little or no reflectivity, such as fur or hair
 - Subjects with very low contrast (such as a person wearing clothing of the same color as the background)
 - · Subjects moving at high speed
 - · Subjects with no substance, such as flames or smoke
 - Subjects photographed through glass
 - · Subjects that are small and far away
 - Extremely bright subjects (such as lights, etc.)
 - In a dark location

Shooting with the Zoom

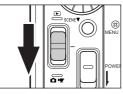
Depending on the distance to your subject, you can the $10\times$ optical zoom and the $4\times$ or $20\times$ digital zoom to magnify the image by up to $200\times$.

• You can also defocus the background by using the optical zoom to enlarge your subject.



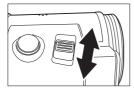
• The more you zoom in, the more susceptible the image is to camera shake.

Set the mode switch to recording mode.



2

Use the zoom lever to adjust the zoom setting and compose the shot. Then take the picture.

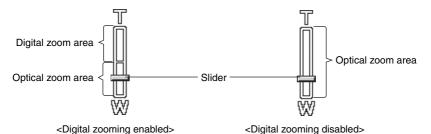




Sliding the zoom lever towards T zooms in and enlarges distant subjects. Sliding it towards W lets you include a wider area in your shot.

Zoom Bar Display

You can use the zoom bar on the LCD monitor to check the zoom setting.



When digital zooming is enabled, the slider color changes as follows according to the image size and the digital zoom magnification.

Yellow : High quality image with minimal loss of image quality.

Red : Subject more enlarged but with slightly lower image quality.



MEMO

- During digital zooming, the camera focuses on the subject in the center of the LCD monitor, regardless of the AF mode setting.
 See "Selecting the Focus Area (AF Mode)" p.90.
- When the camera is turned off or the Auto power off function is activated, the zoom setting reverts to wide-angle (W).

Open the LCD monitor to turn the camera on.

Playing back Still Images

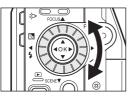
1 Slide the mode switch in the direction of the arrow to select playback mode.



The last image shot appears on the LCD monitor. If the LCD monitor is too bright or too dark, adjust the monitor brightness.

See "Changing the LCD Brightness" 🖒 p.96.

2 Use the jog dial to select the still image you want to play back.



A grainy image appears initially, followed by the normal image.

Still images shot with the camera rotated are initially played back rotated.

LCD Monitor Display during Still Image Playback

The text, numbers and icons displayed differ depending on the selected camera settings.



* Displayed for protected images (\square p.112).

Playing Back Video

Slide the mode switch in the direction of the arrow to select playback mode.



The last image shot appears on the LCD monitor. If the LCD monitor is too bright or too dark, adjust the monitor brightness.

See "Changing the LCD Brightness" ip p.96.

Use the jog dial to select the video you want to play.

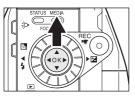


A grainy image appears initially, followed by the normal image.

The video icon is displayed in the video, with film icons also being shown at the top and bottom of the LCD monitor.

Video icon

Move the OK button to **A**.



The selected video is played.

To stop video playback, move the OK button to \checkmark . To pause the video, move the OK button to \blacktriangle . To adjust the speaker volume, use the zoom lever.

T : Increases the volume.

W : Decreases the volume.

Button Operations during Video Playback

Status Button/lever	Stopped	Playing	Paused	Fast-forwarding	Rewinding	
OK		S	witches the displa	ay		
OK button 🔺	Plays the video	Pauses the video Plays the video				
OK button 🔻	Selects the playback method	Stops the video				
OK button	Previous image	One-touch replay –		-		
OK button	Next image	One-touch skip		-	-	
Jog dial left	Previous image	Rewind	Single-frame rewind	Playback	Faster rewinding	
Jog dial right	Next image	Fast forward	Single-frame feed	Faster fast forward	Playback	
Zoom lever T direction	Displays chapters	Volume up				
Zoom lever W direction	Displays thumbnails	Volume down				

One-touch Skip/Replay

This allows you to use skip playback during a video. The duration of the skip differs depending on the length of the video.

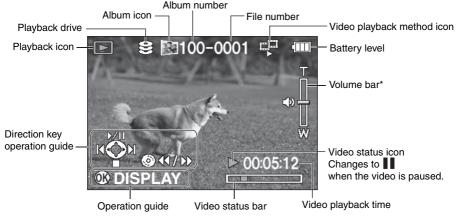
1

While a video is playing or paused, move the OK button to ▶ or ◀.

Use \blacktriangleright for one-touch skip (backward skip by a determined time interval) or \blacktriangleleft for one-touch replay (forward skip by a determined time interval).

LCD Monitor Display during Video Playback

The text, numbers and icons displayed differ depending on the selected camera settings.



* Displayed when the volume is changed.

МЕМО

- Even when you have multiple albums, you can play back the images on all the albums using ◀ and ▶ on the OK button or the jog dial.
- If you move the OK button to ▶ or turn the jog dial to the right when the final image is displayed, the first image appears. Similarly, if you move the OK button to ◀ or turn the jog dial to the left when the first image is displayed, the final image appears.

Dolby[®] Digital Stereo Creator enables consumers to create stereo DVD-Videos with stunning Dolby Digital sound tracks at home. The technology, when utilized nstead of PCM recording, also saves recordable disc space, allowing for higher video resolution or extended recording time on each DVD. DVDs mastered using Dolby Digital Stereo Creator will play back on all DVD-Video players.

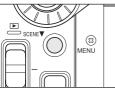


Erasing Images (Erase one Image)

This section describes how to erase images one at a time. Note that you cannot use this method to erase protected images (\square p.112), images with DPOF settings (\square p.119), images included on a DVD creation list (\square p.127), or images stored on a locked SD card (\square p.22).

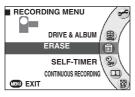
• Erased images cannot be recovered.





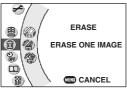


Use the jog dial to select [ERASE] and press the OK button.





Select [ERASE ONE IMAGE] and press the OK button.



4

Use the jog dial to select the image to be erased.



Move the OK button to **A** to select [YES] and press the OK button.



The image is erased and the next image appears. If you do not want to erase the selected image or if you want to cancel image erasing, select [NO] and press the OK button.

You cannot erase a protected image. Select [NO] and press the OK button.

Advanced Photography

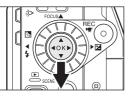
Setting the Scene Setting the Flash Setting the Focus **Using Exposure Bias Using the Backlight Compensation Function** Photography Using the Assist Light Shooting Still Images during Video Recording Using the Conversion Lens or Lens Hood **Changing the Recording Menu Settings** Creating and Selecting Albums Shooting with the Self-timer **Continuous Recording** Setting the Video Quality Setting the Still Image Size Shooting with Natural Color Tones (White Balance) Changing the Sensitivity **Shooting with Image Stabilization** Wind Noise Reduction **Changing the Microphone Sensitivity Digital Zooming** Selecting the Metering Mode Selecting the Focus Area (AF Mode) **Changing Image Colors Changing the Image Contrast** Changing the Image Sharpness **Previewing Images** Pausing Video Recording Changing the LCD Brightness

Setting the Scene

This camera function automatically adjusts the shutter speed and aperture to suit the scene you are shooting or the purpose of the shot.

Your scene setting is retained even when you turn the camera off or the Auto power off function is activated.

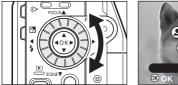
1 Set the camera to recording mode and move the OK button to $\mathbf{\nabla}$.





A list of scene icons appears.

2 Use the jog dial to select the desired scene icon and press the OK button.





To cancel the setting, press the MENU button or move the OK button to $\mathbf{\nabla}$.

Flash Restrictions Imposed by Scene Settings

	Scene Type of shot		Setting	
5			Flash	
AUTO	AUTO	_	All settings are available.	
	PORTRAIT	For shots where the foreground subject stands out clearly against a blurred background.	[RED-EYE REDUCTION]* [SUPPRESSED FLASH]	
-	LANDSCAPE	Distant scenery, landscapes, etc.	[SUPPRESSED FLASH]	
×	SPORTS	For situations involving fast-moving subjects such as sporting events.	[SUPPRESSED FLASH]	
*	NIGHT SCENE	For situations where the background is dark, such as fireworks and nighttime scenery.	[FORCED FLASH]* [SUPPRESSED FLASH]	
+	SNOW &BEACH	For very bright situations such as at snowfields or at the beach.	[FORCED FLASH] [SUPPRESSED FLASH]*	
2	SKIN ENHANCEMENT	For shots where you want to make the subjects skin tones paler.	[RED-EYE REDUCTION]* [SUPPRESSED FLASH]	
-24	SUNSET	For evening or sunset shots.	[SUPPRESSED FLASH]	

* If you change the scene setting, the flash reverts to the default setting.



MEMO

- You cannot specify scene settings when shooting video.
- The explanations for the different scenes are only intended as a general guide. Select the scene setting that works best for you.

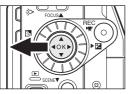
Setting the Flash



You can set the flash when you are shooting still images. Select the setting that best suits the conditions in which you are shooting. Your flash setting is retained even when you turn the camera off or the Auto power off function is activated.



Set the camera to recording mode and move the OK button to \blacktriangleleft .





A list of flash icons appears.

2 Use the jog dial to select the desired flash icon and press the OK button.



To cancel the setting, press the MENU button or move the OK button to \blacktriangleleft .

Suggested Situations for the Flash Settings

Flash		Flash operation and suggested situations	Setting
		Flash operation and suggested situations	Scene
AŬTO	AUTO	The flash fires automatically as required by the shooting conditions.	[AUTO]
50 Auto	RED-EYE REDUCTION (AUTO)	The flash fires automatically as required by the shooting conditions. When it fires, the flash fires twice and the shot is taken when the flash fires the second time. Used for shots or people or animals where you want to reduce the red-eye effect (see "Glossary" ▶ p.198). Works best when the subject is looking directly at the camera and is relatively close.	[AUTO]. [PORTRAIT], [ŠKIN ENHANCEMENT]
4	FORCED FLASH	The flash fires for every shot.Used for backlit shots and shots taken under artificial lighting (fluorescent lights, etc.).	[AUTO], [NIGHT SCENE], [SNOW&BEACH]
*	SUPPRESSED FLASH	The flash does not fire.Used for shots taken using indoor lighting and where the subject is beyond the effective range of the flash, such as theater and sporting events.	[AUTO], [PORTRAIT], [LANDSCAPE], [NIGHT SCENE], [SNOW&BEACH], [SPORTS], [SUNSET], [ŜKIN ENHANCEMENT]



IMPORTANT

• For still images shot during video recording, the flash is set to Suppressed flash.

МЕМО

• You cannot use the flash while recording video. However, you can use the flash to shoot a still image while video recording is paused (when [REC PAUSE] is enabled).

See "Pausing Video Recording" 🖒 p.95.

- When the flash is going to fire, the flash icon on the screen turns yellow when you press the shutter button down halfway.
- When you select [CONTINUOUS RECORDING] or [AEB], the flash setting automatically changes to [SUPPRESSED FLASH].

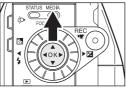
Setting the Focus

This section describes how to set the focus to match the distance to the subject you are photographing or filming.

Your focus setting is retained even when you turn the camera off or the Auto power off function is activated.

• Close-up shots taken using the [MACRO] setting are more likely to be affected by camera shake.

Set the camera to recording mode and move the OK button to \blacktriangle .





A list of focus icons appears.

2 Use the jog dial to select the desired focus and press the OK button.



To cancel the setting, press the MENU button or move the OK button to \blacktriangle .

Shooting Range Imposed by Focus Settings

Focus		Type of shot
AF	AUTO FOCUS	Zoom W: Approx. 10 cm. to infinity Zoom T : Approx. 1.2 m. to infinity
۲	MACRO	Zoom W: Approx. 1 cm. to infinity Zoom T : Approx. 1.2 m. to infinity
MF	MANUAL FOCUS	Zoom W: Approx. 1 cm. to infinity Zoom T : Approx. 1.2 m. to infinity

Manual Focus

You can also focus the camera manually.

• Manual focus allows you to fix the focus at a set location, so it can be very useful for shots of moving subjects and for dark or strongly backlit situations where the camera has difficulty focusing.

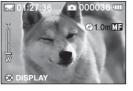
1

In the focus settings (\square p.62), select [**MF**].

The approximate distance is displayed on the screen.

Use the jog dial to focus the shot.

The focus is locked. To re-focus the shot, use the jog dial.



МЕМО

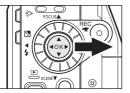
- During video recording, the camera toggles between the currently selected focus setting and manual focusing each time you move the OK button to ▲. If the current focus setting is manual focus, it switches to auto focus.
- If the distance to the subject is 0.1 meters or less with the zoom set to W, the distance shown on the screen changes to ♥. The distance at which ♥ appears differs depending on the zoom setting.

Using Exposure Bias



When there is a large difference (contrast) between the brightness of the subject and the background, or when the subject makes up only a very small part of the image, you can use exposure bias (see "Glossary" \Rightarrow p.197) to get the correct image brightness (exposure). The exposure bias values range from -2.0 to +2.0 and can be set in 1/3-EV increments.

Set the camera to recording mode and move the OK button to ▶.



The exposure bias icon and current exposure value appear.

2 Use the jog dial to set the exposure bias and press the OK button.



Higher settings brighten the image while smaller values darken the image.

Exposure bias icon

-Exposure bias value

Subjects for Which Exposure Bias Works

- + (positive) compensation
 - Printed materials comprising black text on a white page
 - Backlit subjects
 - · Very bright situations such as snowfields and very reflective subjects
 - · Shots where most of the image consists of sky
- (negative) compensation
 - · People illuminated by a spotlight, particularly when the background is dark
 - · Printed materials comprising white text on a dark or black page
 - Subject with very low reflectivity, such as dark foliage or evergreen trees (pines, etc.).



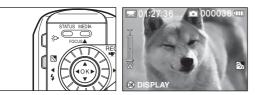
MEMO

• You can set exposure bias while recording video.

Using the Backlight Compensation Function

In shots where a lot of light enters the camera, such as shots taken facing towards the ight source, the subject may appear too dark. Backlight compensation is a type of exposure bias that adjusts the exposure so that the subject appears brighter in the shot. The backlight compensation setting reverts to off when you turn the camera off or the Auto power off function is activated.

Set the camera to recording mode and press the mean button.



Backlight compensation is enabled and the backlight compensation icon is displayed.

МЕМО

- You can set backlight compensation while shooting a video.
- When backlight compensation is set, you can still switch to exposure bias by moving the OK button to ▶.
- If you press the 🛃 button when exposure bias is set, both "exposure bias" and "backlight compensation" are enabled.

Photography Using the Assist Light



Use this feature to make focusing on your subject easier when you are shooting in a dark location.

This setting reverts to off when you change the mode, turn the camera off or the Auto power off function is activated.

1 Set the camera to recording mode and press the ⇒ button.



The assist light on the front of the camera lights and the assist light icon appears on the screen.



MEMO

- Pressing the \gg button alternately turns the assist light on and off.
- If you set the [AF ASSIST LIGHT] to [ON] in the setup menu, the assist light can be turned on by half-pressing the REC button where there is a dark object.

Shooting Still Images during Video Recording



• If the still image size is not set to [0.3M], video recording will be interrupted while the photographed image is saved.

At this point, an animation showing the shutter closing is recorded in the video. See "Setting the Still Image Size" \square p.80.

- You cannot use the flash to shoot a still image during video recording.
- If the remaining available video recording time is less than 10 seconds, you cannot shoot still images during video recording.

During video recording, press the 🗗 REC button down fully.



The camera shoots a still image.



МЕМО

While video recording is paused (when [REC PAUSE] is enabled), you can press
the REC button down halfway to set the focus and exposure and you can use
the flash.

See "Pausing Video Recording" \square p.95.

- During video recording, the down halfway position for the
 REC button is disabled.
- You cannot use [CONTINUOUS RECORDING], [AEB] or the [SELF-TIMER] for still image shooting during video recording.

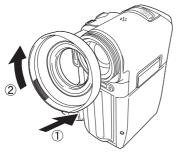
Using the Conversion Lens or Lens Hood

The conversion lens is mounted in front of the lens to change the shooting angle. Use the conversion lens for more distant, wide-angle shooting.

The lens hood is a cover designed to prevent sunlight shining directly into the lines. Use the lens hood when shooting backlit subjects.

Use a commercially available conversion lens or lens hood.

Attach a commercially available conversion lens or lens hood to the lens as shown in the figure.





MEMO

- To mount a conversion lens or lens hood directly onto the lens, use a lens or hood with a threaded mount diameter of 30.5 mm.
- If you take pictures with the flash while the conversion lens or lens hood is attached, the conversion lens or lens hood will block the light from the flash and prevent the picture from being shot correctly.
- If the conversion lens or lens hood is attached, the lens or hood will obstruct the assist light.
- When a conversion lens or lens hood is mounted, the remote control may not function correctly.
- When a conversion lens is mounted, set image stabilization to [OFF].
- When a conversion lens is mounted, the camera may have difficulty auto focusing or the distance displayed for shooting range (□ p.62) and manual focus may be incorrect.
- When a conversion lens or lens hood is mounted, the corners of the image may be dark depending on the zoom setting or the lens hood may appear in the image.

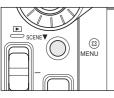
Changing the Recording Menu Settings

The recording menu allows you to change the camera settings.

Except for the "self-timer" setting, your recording menu settings are retained even when you turn the camera off or the Auto power off function is activated.



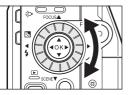
In recording mode, press the MENU button.

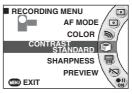




The recording menu appears.

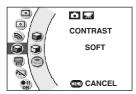
Use the jog dial to select a menu and press the OK button.





The settings for the selected menu appear.

7 Use the jog dial to select the desired setting and press the OK button.



The selected setting is set and the recording menu reappears.

To cancel the setting, press the MENU button.

To return to shooting, press the MENU button.

The camera is now ready to shoot.

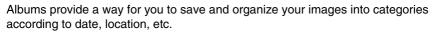
Button Operations during Recording Menu Setting

Screen Button/lever	Menu displayed	Setting displayed	
OK	Confirms the selected setting		
OK button 🔺	Selects a menu setting	Selects a setting	
OK button 🔻	Selects a menu setting	Selects a setting	
OK button	Confirms the selected setting	_	
OK button	_	Returns to the previous screen	
Jog dial right	Selects a menu setting	Selects a setting	
Jog dial left	Selects a menu setting	Selects a setting	
MENU	Returns to recording mode	Returns to the menu	
Mode switch 🗖 🗮	Returns to recording mode		
Mode switch 🕨	Returns to playback mode		

Recording Menu

Menu item	Description	Recording mode	Ref.
DRIVE & ALBUM	Selects the drive and selects or creates albums.		72
ERASE	Erases images.	_	129
SELF-TIMER	Sets the self-timer.		75
CONTINUOUS RECORDING	Sets continuous photography.	9	76
VIDEO QUALITY	Sets the image quality for videos.	ĸ	78
STILL IMAGE SIZE	Sets the size of still images.	Q	80
WHITE BALANCE	Sets the white balance.		82
ISO SENSITIVITY	Sets the sensitivity for still image photography.	Q	84
IMAGE STABILIZATION	Turns image stabilization on and off.	*	85
WIND NOISE REDUCTION	Turns wind noise reduction on and off.	×	86
MICROPHONE SENSITIVITY	Sets the microphone sensitivity.	*	87
DIGITAL ZOOM	Turns digital zooming on and off.	*	88
METERING MODE	Sets the metering mode used to calculate the exposure.		89
AF MODE	Sets the area used for setting the focus.	₩ 🗅	90
COLOR	Sets the image colors.	\\\\\	91
CONTRAST	Sets the dark-light contrast for images.		92
SHARPNESS	Sets the image sharpness.		93
PREVIEW	Turns previewing of still images on and off.	9	94
REC PAUSE	Sets the operation of the REC button during video recording (record/pause).	ĸ	95
LCD BRIGHTNESS	Sets the brightness of the LCD monitor.	_	96
SETUP	Displays the setup menu.	_	134

Creating and Selecting Albums



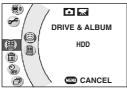
Creating Albums on the Hard Disk Drive

From the recording menu, use the jog dial to select [DRIVE & ALBUM] and press the OK button.



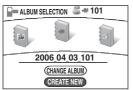


Use the jog dial to select [HDD] and press the OK button.





Move the OK button to $\mathbf{\nabla}$ to select [CREATE NEW] and press the OK button.



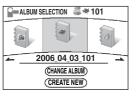
4 Use the jog dial to select an album type and press the OK button.



The newly created album is set as the save location for images and the camera is ready to shoot. Album types include [ART], [KIDS], etc. See "Creating Albums" $rac{r}{>}$ p.36.

Changing the Type of an Album on the Hard Disk Drive

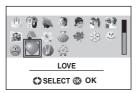
- **1** From the recording menu, use the jog dial to select [DRIVE & ALBUM] and press the OK button.
- **9** Use the jog dial to select [HDD] and press the OK button.
- Q Use the jog dial to select the album you want to change.



Move the OK button to ▼ to select [CHANGE ALBUM] and press the OK button.

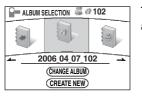


5 Use the jog dial to select the album type and press the OK button.



The changed album is set as the save location for images and the camera is ready to shoot. Selecting an Album on the Hard Disk Drive as the Save Location

- **1** From the recording menu, use the jog dial to select [DRIVE & ALBUM] and press the OK button.
- **9** Use the jog dial to select [HDD] and press the OK button.
- **3** Use the jog dial to select the desired album and press the OK button.



The selected album is set as the save location for images and the camera is ready to shoot.

Selecting an SD Card as the Save Location and Creating Albums

- **1** From the recording menu, use the jog dial to select [DRIVE & ALBUM] and press the OK button.
- **2** Use the jog dial to select [SD] and press the OK button. A message is displayed.
- **3** Use the jog dial to select [YES] or [NO] and press the OK button.



Selecting [YES] sets the newly created album as the save location for images and the camera is then ready to shoot.

Selecting [NO] sets the most recent album on the SD card as the save location for images and the camera is then ready to shoot.



МЕМО

• You cannot select album types on an SD card.

Shooting with the Self-timer



When you use the self-timer, a shot will be taken automatically after a set delay (10 seconds or 2 seconds). This setting reverts to off when you turn the camera off or the Auto power off function is activated.

р РС

- POINT
- Using the [2 SEC.] self-timer delay is an effective way to avoid camera shake when you are shooting still images.

From the recording menu, use the jog dial to select [SELF-TIMER] and press the OK button.



2 Use the jog dial to select the self-timer delay and press the OK button.



The selected delay is set and the recording menu reappears.

To cancel the setting, press the MENU button.

OFF : The self-timer is not used.

2 SEC. : Shooting begins or the picture is taken approximately 2 seconds after you press the '\mathbf{m}' REC button or ▲ REC button.

MEMO

- In self-timer shooting, when you press the REC button or REC button, a timer on the screen starts counting down and the front LED starts flashing. Once the selected delay (10 seconds or 2 seconds) has elapsed, the camera starts shooting or takes the picture.
- You can take as many shots as you like with the same self-timer delay until you either change the self-timer delay setting or turn the camera off.

Continuous Recording

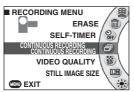


The gigashot offers two continuous recording modes: normal continuous recording or continuous recording in which the exposure is automatically changed (AEB photography). [AEB] provides a convenient way to try out shots with different exposure settings.



· Continuous recording is ideal for subjects where photo opportunities are easily missed, such as with children and pets.

From the recording menu, use the jog dial to select [CONTINUOUS RECORDING] and press the OK button.



Use the jog dial to select the continuous recording mode and press the OK button.



The selected continuous recording mode is set and the recording menu reappears.

To cancel the setting, press the MENU button.

1 SHOT : Images are shot one at a time. CONTINUOUS RECORDING

: The camera records images continuously.

AEB

: The camera records 3 images with the exposure automatically shifted in each shot (±0, -0.3 EV, +0.3 EV in that order).

- Press the MENU button to exit the recording menu and return to recording mode.
- Compose the shot, press the A REC button down halfway to set the focus, and then press the button down fully.

The camera starts recording in the selected continuous recording mode. If you release the
REC button during continuous recording, the camera stops recording.

Image previews are automatically displayed regardless of the preview setting.

- The number of shots taken in continuous recording differs depending on factors such as the still image size settings and the amount of space available on the media.
- If there is insufficient available space on the hard disk drive or SD card, recording ends before the limit on the number of shots is reached.
- The flash cannot be used in continuous recording.
- The interval between shots varies depending on the recording conditions.
- When the self-timer is used, the number of continuous recordings taken is 3.

Setting the Video Quality



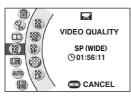
1 From the recording menu, use the jog dial to select [VIDEO QUALITY] and press the OK button.



The image quality settings are displayed along with the available recording time at each setting.



Use the jog dial to select the image quality and press the OK button.



The selected image quality is set and the recording menu reappears.

To cancel the setting, press the MENU button.

SHQ	: Super high quality
SHQ(WIDE)	: Super high quality (wide image size)
HQ	: High quality
HQ(WIDE)	: High quality (wide image size)
SP	: Standard play
SP(WIDE)	: Standard play (wide image size)
LP	: Long play

Approximate Video Recording Times

The table below shows the approximate recording time for videos recorded on to the camera's hard disk drive and SD cards. Because the amount of data used varies depending on the subject being recorded, the recording durations listed below are approximate and may vary.

Video quality		Hard disk drive		SD card					
		30GB (GSC-R30)	2GB	1GB	512MB	256MB	128MB		
Approx. 9 Mb/sec.	13hr30min	6hr40min	27min	13min	6min	3min	1min		
Approx. 9 Mb/sec.	13hr30min	6hr40min	27min	13min	6min	3min	1min		
Approx. 6 Mb/sec.	20hr40min	10hr20min	42min	21min	10min	4min	2min		
Approx. 6 Mb/sec.	20hr40min	10hr20min	42min	21min	10min	4min	2min		
Approx. 4 Mb/sec.	30hr10min	15hr00min	61min	30min	15min	7min	3min		
Approx. 4 Mb/sec.	30hr10min	15hr00min	61min	30min	15min	7min	3min		
Approx. 2 Mb/sec.	55hr30min	27hr40min	112min	56min	28min	12min	6min		
	Approx. 9 Mb/sec. Approx. 9 Mb/sec. Approx. 6 Mb/sec. Approx. 4 Mb/sec. Approx. 4 Mb/sec. Approx.	Ality Approx. 9 Mb/sec. 9 Mb/sec. 13hr30min Approx. 9 Mb/sec. 13hr30min Approx. 6 Mb/sec. 20hr40min Approx. 6 Mb/sec. 20hr40min Approx. 30hr10min Approx. 4 Mb/sec. 30hr10min Approx. 4 Mb/sec. 30hr10min	Ality 60GB* 30GB (GSC-R60) (GSC-R30) Approx. 13hr30min 6hr40min Approx. 13hr30min 6hr40min Approx. 20hr40min 10hr20min Approx. 20hr40min 10hr20min Approx. 30hr10min 15hr00min Approx. 30hr10min 15hr00min Approx. 4 Mb/sec. 30hr10min 27hr40min	Ality 60GB* (GSC-R60) 30GB (GSC-R30) 2GB Approx. 9 Mb/sec. 13hr30min 6hr40min 27min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min	Ality 60GB* (GSC-R60) 30GB (GSC-R30) 2GB 1GB Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min Approx. 6 Mb/sec. 30hr10min 15hr00min 61min 30min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min 30min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min 30min	Ality 60GB* (GSC-R60) 30GB (GSC-R30) 2GB 1GB 512MB Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min 10min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min 10min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min 30min 15min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min 30min 15min	Ality 60GB* (GSC-R60) 30GB (GSC-R30) 2GB 1GB 512MB 256MB Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min 3min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min 3min Approx. 9 Mb/sec. 13hr30min 6hr40min 27min 13min 6min 3min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min 10min 4min Approx. 6 Mb/sec. 20hr40min 10hr20min 42min 21min 10min 4min Approx. 6 Mb/sec. 30hr10min 15hr00min 61min 30min 15min 7min Approx. 4 Mb/sec. 30hr10min 15hr00min 61min 30min 15min 7min		

* 1GB = 1 billion bytes. The actual formatted capacity may be lower than the figure shown here.



MEMO

- When you select [SHQ(WIDE)], [HQ(WIDE)] or [SP(WIDE)], a black border appears at the top and bottom of the LCD monitor.
- If you shoot a still image with [SHQ(WIDE)], [HQ(WIDE)] or [SP(WIDE)] selected, the still image is also shot in the wide size.
- The available recording time actually displayed will vary depending on the image quality and the amount of space available on the drive.

Setting the Still Image Size



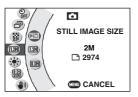
1 From the recording menu, use the jog dial to select [STILL IMAGE SIZE] and press the OK button.



The available image sizes are displayed along with the number of available shots for each size.



Use the jog dial to select the image size and press the OK button.



The selected image size is set and the recording menu reappears.

To cancel the setting, press the MENU button.

2M : 1600 × 1200 pixels

1.2M : 1280 × 960 pixels

 $0.3M:640 \times 480$ pixels

When you select [SHQ(WIDE)], [HQ(WIDE)] or [SP(WIDE)] as the video quality, the still image sizes are as follows:

 $\begin{array}{ll} 2M & : 1600 \times 900 \text{ pixels} \\ 1.2M : 1280 \times 720 \text{ pixels} \\ 0.3M : 640 \times 360 \text{ pixels} \end{array}$

Approximate Number of Available Shots for Still Images

The table below shows the approximate number of still images that may be stored on to the camera's hard disk drive and SD cards. Because the amount of data used varies depending on the size of each image, the number of storable images listed below is approximate and may vary.

Still image size	Hard disk drive		SD card				
	60GB* (GSC-R60)	30GB (GSC-R30)	2GB	1GB	512MB	256MB	128MB
2M	32,000	30,508	2,056	1,036	515	237	119
1.2M	32,000	32,000	3,427	1,728	859	396	199
0.3M	32,000	32,000	10,282	5,184	2,578	1,189	599

* 1GB= 1 billion bytes. The actual formatted capacity may be lower than the figure shown here.

MEMO

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- The printing and other applications for the different image sizes are as follows: 2M : Printing at L or postcard size, etc.
 - 1.2M : Wallpaper on a PC, etc.

0.3M : As an e-mail attachment, etc.

- The number of available shots actually displayed will vary depending on the image size and the amount of space available on the drive.
- When the still image size is set to [2M], pressing the AREC button down halfway widens the area that can be photographed and the screen display changes accordingly. When this occurs, the center of the image may shift. If you release the REC button or press the button down fully to take the picture and then do not use the camera controls for around 3 seconds, the screen display reverts to its original area.

Shooting with Natural Color Tones (White Balance) 🗮 💼

When you take pictures under a range of different light sources, you can use the white balance (see "Glossary" \square p.198) setting to obtain more natural-looking colors.

POINT

• If the stored white balance setting is unsuitable, you can use presets to manually set the white balance.

• If you use a setting other than [AUTO] and the selected setting does not match the light source, the color tones may appear unnatural.

1 From the recording menu, use the jog dial to select [WHITE BALANCE] and press the OK button.



2 Use the jog dial to select the white balance and press the OK button.



If you selected [PRESET], proceed to "Overwriting preset data" or "Using preset data". If you selected another setting, the camera reverts to recording mode. To cancel the setting, press the MENU button.

AUTO : Automatic adjustment

SUNLIGHT : For recording in sunlight

CLOUD : For recording under cloudy skies

FLUORESCENT LIGHT 1

: For recording under daylight fluorescent lights (fluorescent lights with a bluish cast)

FLUORESCENT LIGHT 2

: For recording under neutral fluorescent lights (fluorescent lights with a reddish cast)

INCANDESCENT LAMP

- : For recording under incandescent lights
- PRESET : Presets (using data stored by the user)

Overwriting Preset Data

This procedure stores new preset data for the current light source.

Select [PRESET] and use the jog dial to select [OVERWRITE DATA] from the menu that appears. Then press the OK button.



A message is displayed.

Position a white subject (a white dish or piece of paper) so that it fills the displayed frame and press the OK button.



A message is displayed and the camera is then ready to shoot.

MEMO

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• When you are setting the white balance, ensure that the subject (the white dish or piece of paper) completely fills the displayed frame.

Using Preset Data

This section explains how to use existing preset data.

1 Select [PRESET] and use the jog dial to select [USE DATA] from the menu that appears. Then press the OK button.



The camera reverts to recording mode.

Changing the Sensitivity



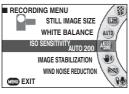
This option sets the sensitivity used when you shoot images. When you are shooting in dark locations or anywhere flash use is forbidden, it is recommended that you increase the sensitivity.

ケ POINT

• When you are shooting fast-moving subjects, increasing the sensitivity also increases the shutter speed and helps to reduce blurring of the subject.

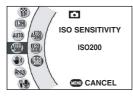
• Increasing the sensitivity also increases the likelihood of noise appearing in your images and may result in duller colors on printed images.

1 From the recording menu, use the jog dial to select [ISO SENSITIVITY] and press the OK button.



2

Use the jog dial to select the sensitivity and press the OK button.



The selected sensitivity is set and the recording menu reappears.

To cancel the setting, press the MENU button.

AUTO 200: Automatically adjusted in the range between ISO100 and ISO200.

ISO100 : Equivalent to ISO100

ISO200 : Equivalent to ISO200 (high sensitivity)

Shooting with Image Stabilization



mage stabilization reduces the problem of camera shake when you are shooting video.

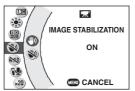
• Image stabilization is particularly useful when you are using the zoom.

- Image stabilization may be ineffective with excessive camera shake or when you are tracking a moving subject.
- The effects gained from Image stabilization differ depending on scene settings and surrounding brightness. Maximum effects cannot be gained in dark locations.
- The Image stabilization function is designed to correct camera shake during video recording and does not function when you are shooting still images.

1 From the recording menu, use the jog dial to select [IMAGE STABILIZATION] and press the OK button.



2 Use the jog dial to select the setting and press the OK button.



The selected setting is set and the recording menu reappears.

To cancel the setting, press the MENU button.

ON : The Image stabilization function is used.

OFF : The Image stabilization function is not used.

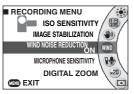
Wind Noise Reduction



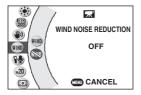
This function reduces wind noise in the recorded sound when you are shooting video.

• This function is not effective if you shoot with the microphone subjected directly to wind.

From the recording menu, use the jog dial to select [WIND NOISE REDUCTION] and press the OK button.



2 Use the jog dial to select the setting and press the OK button.



Wind noise reduction is set and the recording menu reappears.

To cancel the setting, press the MENU button.

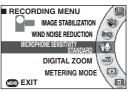
ON : The Wind noise reduction function is used.

OFF : The Wind noise reduction function is not used.

Changing the Microphone Sensitivity

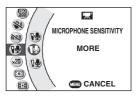
Use this procedure to set the microphone sensitivity during video recording.

From the recording menu, use the jog dial to select [MICROPHONE SENSITIVITY] and press the OK button.





Use the jog dial to select the sensitivity and press the OK button.



The selected sensitivity is set and the recording menu reappears.

To cancel the setting, press the MENU button.

STANDARD: Sets the normal microphone sensitivity.

: Sets a higher microphone sensitivity. MORE Select this setting to record low sounds that are difficult to hear.

LESS : Sets a lower microphone sensitivity. Select this setting to reduce ambient noise.

Digital Zooming

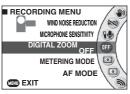


Digital zooming using digital processing to further enlarge the central portion of the screen.

Pixel interpolation technology ensures that the specified number of image pixels are still recorded when digital zooming is used.

• Using the digital zoom lowers the image quality. This is particularly so when you use the 20× digital zoom to shoot still images.

From the recording menu, use the jog dial to select [DIGITAL ZOOM] and press the OK button.



2

Use the jog dial to select the magnification and press the OK button.



The digital zoom is set and the recording menu reappears.

To cancel the setting, press the MENU button.

 $4\times$: The $4\times$ digital zoom is used.

(max. 40× together with 10× optical zoom)

 $20\times$: The 20 \times digital zoom is used.

(max. 200× together with 10× optical zoom)

OFF : The digital zoom is not used.

Selecting the Metering Mode

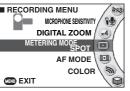


Use this procedure to specify the metering mode used for exposure calculation.

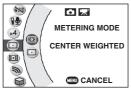
• Using the [SPOT] setting for backlit subjects enables you to match the exposure for a specific subject.

- If the metering point is too bright, the photographed image will be dark.
- If the metering point is too dark, the photographed image will be washed out.

From the recording menu, use the jog dial to select [METERING MODE] and press the OK button.



2 Use the jog dial to select [CENTER WEIGHTED] or [SPOT] and press the OK button.



The selected metering mode is set and the recording menu reappears.

To cancel the setting, press the MENU button.

CENTER WEIGHTED

- : The camera sets the exposure by metering the entire image but with particular emphasis on the central part of the image.
- SPOT: The camera sets the exposure by metering just a very small area at the center of the image.

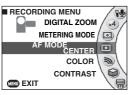
Selecting the Focus Area (AF Mode) 🗖

Use this procedure to specify the area used to set the focus.

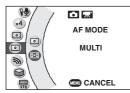
POINT

 In shots such as group photos where there are many subjects, or where the subject is not in the center of the shot, use the [MULTI] setting to reduce the likelihood of the shot being incorrectly focused.

From the recording menu, use the jog dial to select [AF MODE] and press the OK button.



2 Use the jog dial to select [CENTER] or [MULTI] and press the OK button.



The selected AF mode is set and the recording menu reappears.

To cancel the setting, press the MENU button.

- CENTER : The camera sets the focus by measuring the distance to subject in the center of the shot. The area used for focusing is always displayed in the center of the LCD monitor screen.
- MULTI : The camera determines which of a number of points should be used for measuring the focal distance.

The focus area is displayed in the part of the image used for focusing.



MEMO

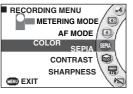
 During digital zooming, the camera focuses on the subject in the center of the LCD monitor regardless of the AF mode setting.
 See "Shooting with the Zoom" p p.50.

Changing Image Colors



Use this procedure to select the colors used in images you shoot. This also allows you to shoot images in black and white or in sepia tone.

1 From the recording menu, use the jog dial to select [COLOR] and press the OK button.





• Use the jog dial to select the colors and press the OK button.

COLOR COLOR STANDARD The selected colors are set and the recording menu reappears.

To cancel the setting, press the MENU button.

STANDARD : Color VIVID : Vivid color MONOCHROME : Black and white SEPIA : Sepia

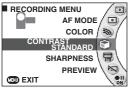
Changing the Image Contrast



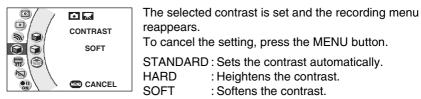
Use this procedure to set the degree of difference between light and dark in images you shoot. You can use this function to heighten or soften the contrast and change the tone of your images.

7

From the recording menu, use the jog dial to select [CONTRAST] and press the OK button.



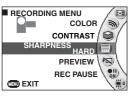
2 Use the jog dial to select the contrast setting and press the OK button.



Changing the Image Sharpness 🛛 🗮

Use this procedure to sharpen or soften the image outlines. You can use this function to make the outlines of objects crisper or make them less clearly defined, altering the tone of the image.

1 From the recording menu, use the jog dial to select [SHARPNESS] and press the OK button.



2 Use the jog dial to select the sharpness setting and press the OK button.

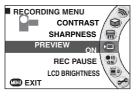
SHARPNESS	The selected sharpness is set and the recording menu reappears. To cancel the setting, press the MENU button.
	STANDARD : Normal edge sharpness HARD : Sharper edges SOFT : Softer edges

Previewing Images

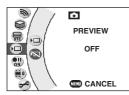
This function displays the photographed image on the camera's LCD monitor immediately after you take the picture.

Previewing is useful for checking the composition and brightness of photographed images.

From the recording menu, use the jog dial to select [PREVIEW] and press the OK button.



2 Use the jog dial to select the setting and press the OK button.



Previewing is set and the recording menu reappears. To cancel the setting, press the MENU button.

ON : The preview function is used. OFF : The preview function is not used.



мемо

• The preview screen is displayed in continuous and AEB recording regardless of the preview function setting.

Pausing Video Recording

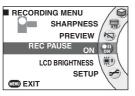


Using the REC PAUSE function enables you to pause during video recording. When you resume shooting after a pause, a chapter (see "Glossary" ⊯p.197) is inserted.

POINT

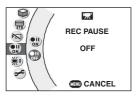
While video recording is paused, you can shoot still images with the flash, set the focus by pressing the REC button halfway and use the self-timer to take pictures.

From the recording menu, use the jog dial to select [REC PAUSE] and press the OK button.





Use the jog dial to select the setting and press the OK button.



The REC PAUSE setting is set and the recording menu reappears.

To cancel the setting, press the MENU button.

ON : The REC PAUSE function is enabled. Pressing the \₩ REC button during video recording pauses shooting and inserts a chapter. OFF : The REC PAUSE function is disabled.

MEMO

• Inserting chapters in a video allows you to select different starting points during video playback.

See "Selecting the Starting Point for Video Playback" Dp.103.

Changing the LCD Brightness

POINT

· Making the LCD brighter makes it easier to see when you are outdoors or in other bright conditions.



 If you reduce the LCD brightness and then move to a bright location, there may appear to be no image on the LCD monitor.

Changing the LCD Brightness from the Photography (or Playback) Menu

From the recording (or play) menu, use the jog dial to select [LCD BRIGHTNESS] and press the OK button.



Use the jog dial to adjust the brightness and press the OK 2 button.



The LCD brightness is set and the recording menu reappears. To cancel the setting, press the MENU button.

MEMO

You can also set the LCD brightness from the play menu.



Changing the LCD Brightness during Video Recording

While recording video, press the MENU button.



The LCD brightness icon appears on the screen.

2 Use the jog dial to adjust the brightness and press the OK button.



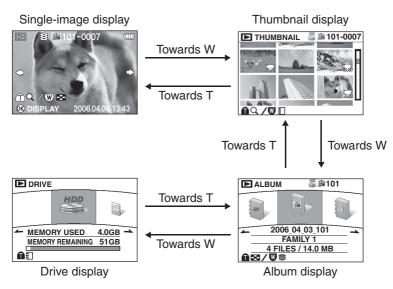
The LCD brightness is set.

Advanced Playback

Changing Levels Selecting the Video Playback Method **Capturing Single Video Frames as Still Images** Selecting the Starting Point for Video Playback Using Zoomed Playback Viewing Rotated Still Images Switching the Playback Display **Changing Playback Settings** Setting up and Running Auto Play **Protecting Images Copying Images Moving Images** Writing Print Information (DPOF Settings) Printing Directly from the Camera Using PictBridge **Editing Videos Creating Image Lists for Recording to DVD**

Changing Levels

When you are searching for a particular image, you can use the zoom lever to select "list view", "album" or "drive".



Displaying Images as a List (Thumbnail Display)

This feature allows you to view a collection of your images at a smaller (thumbnail) size. In this manual, this way of viewing reduced images is called "thumbnail display". Thumbnail display allows you to view 6 images at once.

1 Select playback mode and then slide the zoom lever towards W.



The images are displayed as thumbnails.

If there are 7 or more images, use the jog dial to scroll the screen.

To view a selected thumbnail image at the normal size, slide the zoom lever towards T.

To Move to Another Album

There are 2 ways to do this:

- Use the jog dial to scroll the screen and position the cursor on "next album" (or "previous album"). Then press the OK button.
- Move to another level to display the albums and then select the album to want to play back.

See "Selecting Albums and Drives for Playback" D p.100.

Selecting Albums and Drives for Playback

Select thumbnail display.

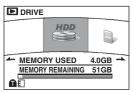
Slide the zoom lever towards W.



The screen changes to album display.

Use the jog dial to select the album to want to play back. Slide the zoom lever towards T to display the thumbnails for the images in the selected album.

In the album display, slide the zoom lever towards W.



The screen changes to drive display.

Use the jog dial to select the drive to want to play back. Slide the zoom lever towards T to display the albums on the selected drive.



MEMO

Selecting the Video Playback Method

You can choose from 2 video playback methods:

CONTINUOUS PLAY Plays through to the end of the videos in the album in order. 1 FILE Plays just the selected video.

- **1** Select playback mode.
- **9** Use the jog dial to select the video you want to play.

3 Move the OK button to $\mathbf{\nabla}$.

The video playback icon appears.

4 Use the jog dial to select either [CONTINUOUS PLAY] or [1 FILE] and press the OK button.



Capturing Single Video Frames as Still Images

You can capture one frame from a video as a still image. The size of captured still images is 0.3MB.

1 Select playback mode.

2

Use the jog dial to select the video you want to play.

Move the OK button to \blacktriangle .



Video playback begins.

In the scene containing the image you want to capture, move the OK button to ▲ to pause the video.



Using the jog dial, you can use single-frame feed (or rewind) to precisely locate the scene you want to capture as a still image.



Press the 💼 REC button down fully.

The selected scene is captured as a still image.

Selecting the Starting Point for Video Playback

When playing a video, you can use this procedure to specify a chapter (see "Glossary" \Rightarrow p.197) that was inserted when the video was paused during shooting and select the chapter as the starting point for playback.

• You cannot add chapters after a video has been recorded.

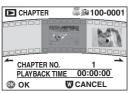
Select playback mode.

9 Use the jog dial to select the video you want to play.

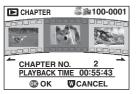


3 Slide the zoom lever towards T.

The chapters are displayed.



Use the jog dial to select a chapter and press the OK button.



Video playback begins from the location of the selected chapter.

Using Zoomed Playback



Use zoomed playback for detailed image checking.

Zoomed Still Image Playback

1 Select playback mode and use the jog dial to select the still image you want to view zoomed.

Slide the zoom lever towards T.



The image is enlarged. The pale blue frame displayed in the image shows the currently enlarged area. Slide the zoom lever towards W to zoom back out.

You can move the enlarged area around using \blacktriangleleft , \triangleright , \blacktriangle and ∇ on the OK button. Adjust the area by watching the position of the frame on the screen.

To exit zoomed playback and return to the normal-size display, press the OK button.



- → Slide towards T →
- 🛏 Slide towards W 🔸



Zoomed Video Playback

- **1** Select playback mode and use the jog dial to select the video you want to view zoomed.
- After video playback begins, press the MENU button.

3 Slide the zoom lever towards T.



The image is enlarged. The pale blue frame displayed in the image shows the currently enlarged area. Slide the zoom lever towards W to zoom back out. You can move the enlarged area around using \blacktriangleleft , \triangleright , \blacktriangle and \triangledown on the OK button. Adjust the area by watching the position of the frame on the screen.



Press the OK button.



The video is played back at its currently enlarged size. When a video is shown enlarged, [Q] appears in the top-left corner of the screen.



MEMO

• Zoomed playback is cancelled when you stop playback.

Viewing Rotated Still Images

- Still images shot with the camera rotated are initially played back rotated.
- You can also zoom rotated images.



- You cannot rotate videos.
- **1** Select playback mode and use the jog dial to select the still image you want to rotate

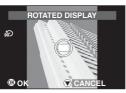
still image you want to rotate.

2 Move the OK button to \mathbf{V} .



Rotate the still image with the jog dial.

The image rotates 90° each time you turn the jog dial.



Press the OK button.

The rotated display is set.

To cancel rotated display and return to the original view, move the OK button to $\mathbf{\nabla}$.



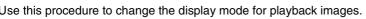
4

MEMO

- The rotated display remains even if you turn the camera off. However, rotated display is disabled for protected still images and still images stored on a locked SD card.
- Rotated still images are also shown rotated when viewed as thumbnails.
- Rotated images may not appear rotated when viewed on other devices (PCs, etc.).

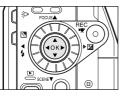


Switching the Playback Display



Select playback mode and use the jog dial to select the image.

Press the OK button.



Each time you press the OK button, the information display mode changes as shown below.

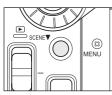
<Standard> <Hidden> Normal playback mode (still image). Image information not shown. 8 100-0001 19 / W 🖻 SPLAY 2006.04.0 <Information display> Detailed image information displayed. € 100-0001 AGE SIZE 40X480 ALIT UTTER SPEED SURE BIA SENSITIVITY : IS ILE SIZE

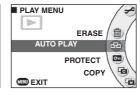
Changing Playback Settings

As well as changing settings for playback, you can also use this procedure to specify settings for image protection and printing.

1

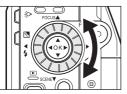
In playback mode, press the MENU button.





The play menu appears.

2 Use the jog dial to select a menu and press the OK button.





3 Specify the desired options in the settings screen.

Exiting settings returns you to the play menu.

To exit the play menu, press the MENU button.

The camera reverts to play mode.

Button Operations during Play Menu Setting

Screen Button/lever	Menu displayed	Setting displayed
OK	Confirms the selected setting	
OK button 🔺	Selects a menu setting	Selects a setting
OK button ▼	Selects a menu setting	Selects a setting
OK button 🕨	Confirms the selected setting	
OK button	_	Returns to the previous screen
Jog dial right	Selects a menu setting	Selects a setting
Jog dial left	Selects a menu setting	Selects a setting
MENU	Returns to playback mode	Returns to the play menu
Mode switch 🗅 🗮	Returns to recording mode	
Mode switch D	Returns to playback mode	

Play Menu

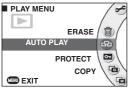
Menu item	Description	Ref.
ERASE	Erases images.	129
AUTO PLAY	Sets the patterns and types of images played back by Auto play and also runs Auto play.	110
PROTECT	Applies protection or read-only status to images.	112
COPY	Copies images.	115
MOVE	Moves images between albums.	117
DPOF	Selects the images to be printed and sets the number of prints and the date display.	119
PictBridge	Prints images by connecting the camera directly to the printer.	122
VIDEO EDITING	Deletes unwanted sections of videos.	124
DVD CREATION LIST	Creates a list for copying saved images onto a DVD.	127
LCD BRIGHTNESS	Sets the LCD monitor brightness.	96
SETUP	Moves to the setup menu.	134

Setting up and Running Auto Play 🕅 🗖

Auto play automatically plays back images sequentially.

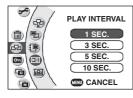
Setting up Auto Play

From the play menu, use the jog dial to select [AUTO PLAY] and then press the OK button.



The Auto play menu screen appears.

2 Use the jog dial to select a setting and press the OK button.



1	EXECUTE	: Runs Auto play.
		S: Selects the types of images shown
		by Auto play.
	ALBUM	: Selects the album to be shown by
		Auto play.
	PLAY INTERVAL	: Selects the interval used when
		images change.
	ANIMATION	: Selects the pattern used when
		images change.

3 Use the jog dial to select the desired setting and press the OK button.

The selected setting is set and the Auto play menu screen reappears.

TARGET IMAGES	
STILL IMAGE	: Plays only still images.
VIDEO	: Plays only videos.
STILL & VIDEO	: Plays both videos and still images.
DVD CREATION LIST	: Automatically plays videos and still images in a DVD creation list.
	See "Creating Image Lists for Recording to DVD" D

ALBUM

CURRENT ALBUM: Plays only the currently selected album. ALL ALBUMS : Plays all the albums.

PLAY INTERVAL

1 SEC. : Switches images at 1-second intervals.

3 SEC. : Switches images at 3-second intervals.

5 SEC. : Switches images at 5-second intervals.

10 SEC. : Switches images at 10-second intervals.

ANIMATION

RANDOM : Random playback

PATTERN 1: Playback using pattern 1

PATTERN 2: Playback using pattern 2

NONE : No animation used.



MEMO

- Auto power off does not operation during Auto play.
- The play interval setting is only valid for still images.
- The ALBUM setting is invalid when [DVD CREATION LIST] is selected for target images.

Running Auto Play

1 From the play menu, use the jog dial to select [AUTO PLAY] and then press the OK button.

The Auto play menu screen appears.

2 Use the jog dial to select [EXECUTE] and press the OK button.



Auto play begins.

While Auto play is running, you can pause or restart playback by moving the OK button to \blacktriangle . Auto play repeats until you move the OK button to \blacktriangledown to end Auto play.

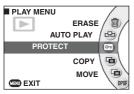
Protecting Images

To prevent images from being inadvertently erased, you can make them read-only files. Images with this status are referred to as "protected" images.

 Formatting erases all your images, including protected images. Erased images cannot be restored.

Selecting and Protecting Images

From the play menu, use the jog dial to select [PROTECT] and press the OK button.



Use the jog dial to select the image to be protected and press the OK button.



The [on] icon appears below the protected image. To remove the protection, press the OK button again. To protect multiple images, repeat this procedure. To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively.



Move the OK button to ▼ to select [OK] and press the OK button.

The images are protected and the play menu reappears. If you do not want to protect the images, select [CANCEL] and press the OK button.

Confirming Images in Enlarged View

In step 2, slide the zoom lever towards T.

Sliding towards W in enlarged view will return to the protection settings screen.

Protecting all Images in an Album

In step 2, move the OK button to V to select [SELECT ALL], then press the OK button.



MEMO

- The [Cm] icon is displayed for protected images on the playback screen and when protection is set.
- · Several hours may be required if you are setting protection for a large volume of

Protecting Albums

You can use this procedure to protect all the images in an album.

1 From the play menu, select [PROTECT] and press the OK button.

Slide the zoom lever towards W.

3

Use the jog dial to select the album to be protected and press the OK button.



The [Con] icon (black) appears below the protected album.

To remove the protection, press the OK button again. To protect multiple albums, repeat this procedure.

The [cm] icon (gray) is displayed below albums that contain both protected and unprotected images.

4 Move the OK button to ▼ to select [OK] and press the OK button.

The albums are protected and the play menu reappears.

If you do not want to protect the albums, select [CANCEL] and press the OK button.

To Protect all the Albums

In step 3, move the OK button to $\pmb{\nabla}$ to select [SELECT ALL] and then press the OK button.

Removing Protection

- **1** From the play menu, select [PROTECT] and press the OK button.
- **2** Use the jog dial to select the image to be unprotected and press the OK button.



The [Cm] icon (black) below the protected image disappears.

To retain the protection, press the OK button again. To unprotect multiple images, repeat this procedure.

2

Move the OK button to $\mathbf{\nabla}$ to select [OK] and press the OK button.

The protection is removed and the play menu reappears. To cancel the procedure, select [CANCEL] and press the OK button.

To Unprotect all the Images in an Album

In step 2, move the OK button to $\mathbf{\nabla}$ to select [CLEAR ALL] and then press the OK button.



МЕМО

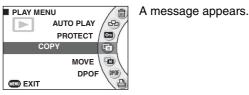
 Images with DPOF settings are indicated by the [▶] icon and cannot be unprotected. To unprotect such images, first clear the DPOF settings. See "Clearing DPOF Settings" ▶ p.121.

Copying Images



• You should connect the AC adapter when copying images. If the battery runs flat while images are being copied, copying stops and the camera automatically turns off. If this happens, connect the AC adapter or ensure that the battery is fully charged before copying the images again.

From the play menu, use the jog dial to select [COPY] and press the OK button.



Use the jog dial to select [NEXT] and press the OK button.



3 Use the jog dial to select the image to be copied and press the OK button.



The [**b**] icon appears below the image to be copied. To stop the image from being copied, press the OK button again.

To copy multiple images, repeat this procedure. To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively.

Move the OK button to ▼ to select [OK] and press the OK button.

A message appears.

5

If you do not want to copy the images, select [CANCEL] and press the OK button.

Use the jog dial to select [NEXT] and press the OK button.



6

to be copied and press the OK button.

COPY		
HDD		
	TED FILE 626MB	1
@ OI	K CANCEL	



Use the jog dial to select the album to which the images are to be copied and press the OK button.



To copy the images to a new album, move the OK button to $\mathbf{\nabla}$ to select [CREATE NEW] and press the OK button. Then use the jog dial to select the album type and press the OK button.

When copying ends, the play menu reappears.

Confirming Images in Enlarged View

In step 3, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the copy settings screen.

Copying all Images in an Album

In step 3, move the OK button to $\mathbf{\nabla}$ to select [SELECT ALL], then press the OK button.



МЕМО

• Several hours may be required if you are copying a lengthy video or a large volume of images together.

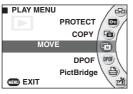
Moving Images



Use this procedure to move photographed images to another album.

You should connect the AC adapter when moving images.
 If the battery runs flat while images are being moved, moving stops and the camera automatically turns off. If this happens, connect the AC adapter or ensure that the battery is fully charged before moving the images again.

1 From the play menu, use the jog dial to select [MOVE] and press the OK button.



Use the jog dial to select [NEXT] and press the OK button.



9 Use the jog dial to select the image to be moved and press the OK button.



The [inclusted line image from being moved, press the OK button again.

To move multiple images, repeat this procedure. To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively.

Move the OK button to ▼ to select [OK] and press the OK button.

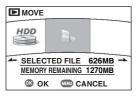
A message appears. If you do not want to move the images, select [CANCEL] and press the OK button.

Use the jog dial to select [NEXT] and press the OK button.



6

Use the jog dial to select the drive to which the images are to be moved and press the OK button.



If the images are being moved to a different drive, the sizes of the files selected for moving are displayed. E.g. Moving images from the hard disk drive to an SD card.

Use the jog dial to select the album to which the images are to be moved and press the OK button.



To move the images to a new album, move the OK button to $\mathbf{\nabla}$ to select [CREATE NEW] and press the OK button. Then use the jog dial to select the album type and press the OK button.

When moving ends, the play menu reappears.

Confirming Images in Enlarged View

In step 3, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the move settings screen.

Moving all Images in an Album

In step 3, move the OK button to $\mathbf{\nabla}$ to select [SELECT ALL], then press the OK button.



MEMO

• Several hours may be required if you are moving a lengthy video or a large volume of images together.

Writing Print Information (DPOF Settings)

Use this procedure to specify the settings for date display and the number of prints of mages you want to print in DPOF-format (see "Glossary" is p.197).

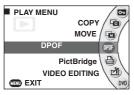
ケ POINT

- DPOF settings allow you print images simply by taking an SD card to a retail store.
- You can also print your images at home on a DPOF-compatible printer.

 DPOF settings can only be specified for still images on an SD card. Copy the images from the hard disk drive to an SD card beforehand. See "Copying Images" p.115.

Specifying Individual DPOF Settings

From the play menu, use the jog dial to select [DPOF] and press the OK button.

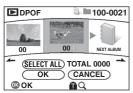


If the hard disk drive is set as the playback drive, a message appears saying [ONLY STILL IMAGES ON SD CARDS ARE DPOF TARGET IMAGES.]. Use the jog dial to select [TO SD] and press the OK button.

• Use the jog dial to select [SET] and press the OK button.



3 Use the jog dial to select the image for which DPOF settings are to be set and move the OK button to ▲ or ▼ to set the number of prints.



To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively. You can specify up to 99 prints per image.

4 when you have finished setting the number of prints, press the OK button.

Use the jog dial to select [OK] and press the OK button.

A file creation confirmation message is displayed.

6 Use the jog dial to select [YES] and press the OK button.



A date printing confirmation message is displayed.

Use the jog dial to select [YES] or [NO] and press the OK button.



A printing information (DPOF) file is created and the play menu reappears.

Confirming Images in Enlarged View

In step 3, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the DPOF settings screen.

Printing all Images in an Album

In step 3, move the OK button to ∇ to select [SELECT ALL] and then press the OK button. Then move the OK button to \blacktriangle or ∇ to set the number of prints.



MEMO

- The [Im] icon is displayed for images with DPOF settings.
- Up to 99 prints can be specified for each image. Also, prints can specified for up to 999 images on the same SD card. However, the maximum number of prints that can be specified for the same SD card is 9,999.
- The image date is printed in the bottom-right corner of the photo.
- The date printed on the photo depends on the date set by the camera. To ensure that the correct date is printed on the photo, check the date setting on the camera before shooting the image.

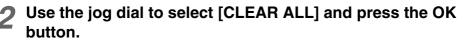
See "Setting the Date and Time" rightarrow p.35.

• Note that some types of printer do not support DPOF settings.

Clearing DPOF Settings

From the play menu, use the jog dial to select [DPOF] and press the OK button.

If the hard disk drive is set as the playback drive, a message appears saying [ONLY STILL IMAGES ON SD CARDS ARE DPOF TARGET IMAGES.]. Use the jog dial to select [TO SD] and press the OK button.



DPOF A confirmation message is displayed.



3

Use the jog dial to select [YES] and press the OK button.



A protection setting removal confirmation message is displayed.

4 Use the jog dial to select [YES] or [NO] and press the OK button.



YES: Clears the DPOF settings and the protection.

NO : Clears the DPOF settings but leaves the protection set.

The play menu reappears.

Printing Directly from the Camera Using PictBridge

By using a PictBridge (see "Glossary" \square p.198) -compatible printer, you can print directly from the camera without using a PC.



- You should connect the AC adapter when printing still images. If the battery runs flat while images are being printed, printing stops and the camera automatically turns off. If this happens, connect the AC adapter or ensure that the battery is fully charged before printing the images again.
- The camera is not guaranteed to connect successfully to all PictBridgecompatible printers.
- If you disconnect the USB cable while the camera is connected to a printer, malfunctions may occur.
- From the play menu, use the jog dial to select [PictBridge] and press the OK button.



2

Use the jog dial to select the still image to be printed and then move the OK button to \blacktriangle or \triangledown to set the number of prints.



To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively. You can set up to 99 prints in all.

- When you have finished setting the number of prints, press the OK button.
- 4

Use the jog dial to select [OK] and press the OK button. A printer connection message is displayed.

5 Connect the camera to the printer with the USB cable. When the connection is completed, the print settings screen appears.

button.

PictBridge	
PAPER SIZE	PRINTER SETTINGS
LAYOUT	PRINTER SETTINGS
PAPER TYPE	PRINTER SETTINGS
PRINT DATE	PRINTER SETTINGS
PRINT	CANCEL
C SELECT	CHANGE

PAPER SIZE

: Selects the paper size for printing.

LAYOUT

: Selects the printing layout.

PAPER TYPE

: Selects the type of paper used for printing.

PRINT DATE

: Chooses whether to print the photography date.

The options that can be set differ depending on the connected printer.

If you change the paper size, the options for layout and paper type are cleared.

7 Use the jog dial to change the settings and press the OK button.

B Move the OK button to $\mathbf{\nabla}$ to select [PRINT] and press the OK button.

Printing begins.

When printing ends, the prints setting screen in step 2 reappears.

If there is no further printing, press the MENU button.

When the [DISCONNECT USB CABLE.] message appears, disconnect the USB cable from the camera and printer.

Confirming Images in Enlarged View

In step 2, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the PictBridge settings screen.

Printing all Images in an Album

In step 2, after pressing the OK button before specifying the number of images, select [SELECT ALL] using the jog dial, then press the OK button. Next, move the OK button to \blacktriangle or \blacktriangledown to specify the number of images.

МЕМО

- You can specify up to 99 prints.
- Note that some types of printer are not compatible with PictBridge.
- Use the AC adapter when connecting the camera to a printer.
- You cannot specify images on the hard disk drive and an SD card at the same time.

Editing Videos



You can use this function to delete the portion of the video before or after a specified point (position).

- You should connect the AC adapter when editing a video.
 If the battery runs flat while a video is being edited, editing stops and the camera automatically turns off. If this happens, connect the AC adapter or ensure that the battery is fully charged before editing the video again.
- You cannot edit protected videos.

Display the video to be edited in playback mode.

Press the MENU button and use the jog dial to select [VIDEO EDITING] from the play menu. Then press the OK button.



The video editing screen appears.



Move the OK button to \blacktriangle to play the video.





At the point to be edited, move the OK button to \blacktriangle to pause playback.

Display the point to be edited by using the jog dial to feed (or rewind) single frames.

When you have identified the point, press the OK button.

6 Use the jog dial to select the editing details and press the OK button.



An editing details confirmation message is displayed.

DELETING THE PREVIOUS PART

: Deletes the section prior to the specified point.

DELETING THE REMAINDER

: Deletes the section after the specified point.

SPECIFY THUMBNAIL IMAGES

: Sets the specified point as the normal display screen and as the screen when thumbnails are displayed. RETURN

: Returns to the video editing screen.

Use the jog dial to select [YES] or [NO] and press the OK button.



When editing ends, the play menu reappears.

Button Operations during Video Editing

Status Button	Stopped	Playing	Paused
OK	Switches the display	Specifies the	editing point
OK button 🔺	Plays the video	Pauses the video	Plays the video
OK button 🔻	-	Stops th	ne video
OK button ◀	-	One-touc	ch replay
OK button 🕨	-	One-tou	uch skip
Jog dial left	-	Rewind	Single-frame rewind
Jog dial right	-	Fast forward	Single-frame feed

Thumbnail Screen

- In video editing when [SPECIFY THUMBNAIL IMAGES] is not selected for the video, the opening scene of the video automatically becomes the thumbnail screen.
- By specifying a distinctive scene from the video as the thumbnail screen, you can make it easier to find a desired video when thumbnails are displayed.
- If you edit a video having a specified thumbnail screen, the leading scene after editing is automatically set as the thumbnail screen, even if the scene specified as the thumbnail screen is not included in the section deleted during editing.



MEMO

- If there is no available disk space, videos cannot be edited. Delete some images or move images to a PC, etc. to increase the available disk space.
- There may be a slight variation between the specified point and the point actually used for editing.

Creating Image Lists for Recording to DVD

This function allows you to pre-select some of the images saved on the hard disk drive for recording onto a DVD.

- Using a PC and the bundled application software, you can quickly and easily burn a DVD with the created list of images.
- See "Using a DVD Creation List to Create DVDs" D p.164.
- You can also use Auto play to check created image lists.
- See "Setting up and Running Auto Play" 🖈 p.110.

• Only images saved on the hard disk drive can be specified in a DVD creation list.

1 From the play menu, use the jog dial to select [DVD CREATION LIST] and press the OK button.



If the SD card is selected as the playback drive, the [ONLY IMAGES ON HARD DISK DRIVE ARE DVD CREATION LIST TARGET IMAGES.] message is displayed.

Use the jog dial to select [TO HDD] and press the OK button.

2 Use the jog dial to select [YES] or [NO] and press the OK button.



When [YES] is selected, the existing data is loaded. Selecting [NO] clears the existing data and replaces it with the new data.

If there is no existing data, this screen is not displayed.

3 Use the jog dial to select [DISC CAPACITY] and press the OK button.

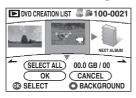


The 3 available disc capacities are 1.4GB, 4.7GB and 8.5GB.

- **4** Use the jog dial to select the DVD capacity and press the OK button.
- **5** Use the jog dial to select [OK] and press the OK button.

6

the DVD and press the OK button.



The [] icon is displayed below the selected image. Repeat this procedure to select the images to be recorded onto the DVD.

To move to the previous or next album, move the OK button to \blacktriangleleft or \blacktriangleright respectively.



Move the OK button to $\mathbf{\nabla}$ to select [OK] and press the OK button.

The DVD creation list is compiled and the play menu reappears.

Confirming Images in Enlarged View

In step 6, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the DVD creation list settings screen.

Recording all Images in an Album

In step 6, move the OK button to $\mathbf{\nabla}$ to select [SELECT ALL], then press the OK button.



МЕМО

- You can specify a still image as the menu background screen for the created DVD. When selecting images to be recorded onto a DVD, press the '\mathbf{m}' REC button to specify the image to be used as the menu background screen. The [____] icon (use in background screen) or [____] icon (use in background screen and store on disc) is displayed below the specified image.
- If the total size of the selected images exceeds the capacity of the DVD, select the images again so that they will fit on one disc.
- Up to 99 images can be recorded onto one disc.
- The [Cn] icon is displayed for images specified in the DVD creation list. When erasing images set to a DVD creation list, remove the protection. An error may occur during creation of a DVD if you had erased images set to the DVD creation list, create the DVD creation list again.
 Soo "Pretoting Images" = p.112

See "Protecting Images" 🖈 p.112.

Advanced Deletion

Erasing Selected Images Erasing Albums Erasing all the Files on a Drive

Erasing Selected Images

Use this procedure to select multiple images to be erased.

- Deleted images cannot be recovered.
- Press the MENU button.

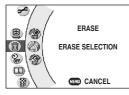
1

2 Use the jog dial to select [ERASE] and press the OK button.

The erase menu appears.

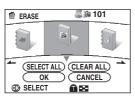
3

Use the jog dial to select [ERASE SELECTION] and press the OK button.





Use the jog dial to select the album containing the images you want to delete and then slide the zoom lever towards T.



5

Use the jog dial to select an image to be deleted and press the OK button.



Move the OK button to \mathbf{V} to select [OK] and press the OK button.

An erase confirmation message is displayed.

Use the jog dial to select [YES] and press the OK button.



When erasing ends, the menu reappears. If you do not want to erase the images, select [NO] and press the OK button.

Confirming Images in Enlarged View

In step 5, slide the zoom lever towards T. Sliding towards W in enlarged view will return to the erase screen.

Erasing all Images in an Album

In step 5, move the OK button to $\mathbf{\nabla}$ to select [SELECT ALL], then press the OK button.

МЕМО

(M)

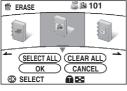
Erasing Albums

Use this procedure to erase multiple albums.

T ATTENTION

- · Erased images cannot be recovered.
- · Protected images cannot be erased. See "Protecting Images" D p.112.
- From the erase menu, use the jog dial to select [ERASE SELECTION] and press the OK button.

Use the jog dial to select the album to be deleted and press the OK button.



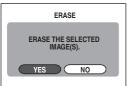
The [find] icon is displayed under the selected album. To erase multiple albums, repeat this procedure.

Move the OK button to \blacktriangle or ∇ to select [OK] and press the OK button.

An erase confirmation message appears.

4

Use the jog dial to select [YES] and press the OK button.



When erasing ends, the menu reappears.

If you do not want to erase the albums, select [NO] and press the OK button.

If there are any protected images, the images other than the protected images are erased.

To Erase all the Albums on a Drive

In step 2, move the OK button to V to select [SELECT ALL] and then press the OK button.



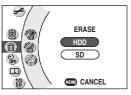
MEMO

• Albums on an SD card cannot be erased if the SD card is locked. See "Write-protection" p.22.

Erasing all the Files on a Drive

Use this procedure to erase the entire contents of the selected drive.

- Erased images cannot be recovered.
- **1** From the erase menu, use the jog dial to select [ERASE ALL IMAGES] and press the OK button.
- **2** Use the jog dial to select the drive to be erased and press the OK button.



An erase confirmation message appears.

Use the jog dial to select [YES] and press the OK button.



When erasing ends, the menu reappears. If you do not want to erase the drive, select [NO] and press the OK button.

If there are any protected images, the images other than the protected images are erased.

МЕМО

3

Î

Basic Camera Settings

Changing the Basic Camera Settings Sound Setting the LEDs Auto Power Off LCD-linked Power Video Output LANGUAGE System

Changing the Basic Camera Settings

This procedure specifies the underlying settings that apply when you use the camera, and s referred to as Setup.

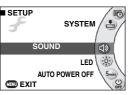
These settings are retained when the camera is turned off or Auto power off is activated.

Press the MENU button.

2 Use the jog dial to select [SETUP] and press the OK button.



3 Use the jog dial to select a menu and press the OK button.



The settings for the selected menu are appear.

4 Use the jog dial to select the desired setting and press the OK button.

The selected setting is set and the setup menu reappears.

5 To exit the setup menu, move the mode switch to the desired mode.

Button Operations during Setup Menu Setting

Screen Button/lever	Menu displayed	Setting displayed
OK	Confirms the s	elected setting
OK button 🔺	Selects a menu setting	Selects a setting
OK button 🔻	Selects a menu setting	Selects a setting
OK button 🕨	Confirms the selected setting	-
OK button	Returns to the recording menu or play menu	Returns to the previous screen
Jog dial right	Selects a menu setting	Selects a setting
Jog dial left	Selects a menu setting	Selects a setting
MENU	Returns to the original menu	Returns to the setup menu
Mode switch 🗖 🛒	Returns to recording mode	
Mode switch D	Returns to playback mode	

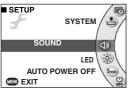
Setup Menu

Menu item	Description	Ref.
SOUND	Sets the startup tone, key operation tone and shutter sound.	137
LED	Specified the front LED settings.	138
AUTO POWER OFF	Specifies the Auto power off function setting.	139
LCD-LINKED POWER	Specifies whether the camera turns on/off when the LCD is opened/closed.	140
LAN SETTINGS	Settings for LAN connection to a DVD recorder with DVR.	173
VIDEO OUTPUT	Sets the video output format used for video devices connected to the camera.	141
LANGUAGE	Sets the display language used in screens.	142
DATE AND TIME SETTING	Sets the date and time and the format used for the date and time settings.	35
SYSTEM	Settings for resetting the system, formatting drives, etc.	143

Sound

This option sets the sounds the camera emits while it is being used (when the camera starts up, when keys are pressed and when a picture is taken).

1 From the setup menu, use the jog dial to select [SOUND] and press the OK button.



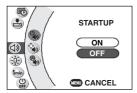
The sound settings screen appears.

• Use the jog dial to select a setting and press the OK button.

	STARTUP
	ON OFF
5min OFF	

STARTUP	: Sets the tone emitted when the camera
	starts up.
OPERATION	: Sets the tone emitted when a button is
	pressed, etc.
SHUTTER	: Sets the sound emitted when the shutter
	is released.

Use the jog dial to select [ON] or [OFF] and press the OK button.



The selected option is set and the sound settings screen reappears.

To specify another setting, repeat steps 2 and 3.

ON : A sound is emitted.

OFF : No sound is emitted.

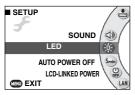
Press the MENU button to return to the setup menu.

Setting the LEDs

This option specifies whether the camera LEDs light during shooting.

1

From the setup menu, use the jog dial to select [LED] and press the OK button.



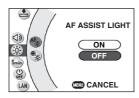
2 Use the jog dial to select [AF ASSIST LIGHT] or [RECORDING LED] and press the OK button.



AF ASSIST LIGHT

- : Sets whether the assist light fires to help focus still photography shots of dark subjects.
- RECORDING LED
 - : Sets whether the LED lights during image recording.

9 Use the jog dial to select [ON] or [OFF] and press the OK button.



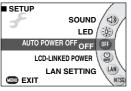
ON : The LED lights. OFF : The LED does not light.

Press the MENU button to return to the setup menu.

Auto Power Off

This option sets the delay after which the camera automatically turns itself off when it has not been used for a set time.

From the setup menu, use the jog dial to select [AUTO POWER OFF] and press the OK button.



Use the jog dial to select the delay time and press the OK button.



The selected delay is set and the setup menu reappears.

- 5 MIN. : The camera turns itself off if it is not used for 5 minutes.
- 10 MIN. : The camera turns itself off if it is not used for 10 minutes.
- OFF : The camera does not automatically turn itself off.





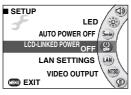
- **MEMO**
- This function does not operate during Auto play.
- . This function does not operate when the camera is connected to an other DVD recorder with DVR, computer, or printer, etc.
- To restore camera operation after Auto power off has been activated, slide the POWER switch to turn the camera back on.

LCD-linked Power

Turning the power On/Off is done by opening or closing the LCD monitor.

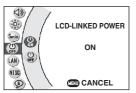
1

From the setup menu, use the jog dial to select [LCD-LINKED POWER] and press the OK button.





Use the jog dial to select [ON] or [OFF] and press the OK button.



The selected time is set and the setup menu reappears.

- ON : Opening and closing the LCD monitor turns the camera on and off.
- OFF : Opening and closing the LCD monitor does not turn the camera on and off.



МЕМО

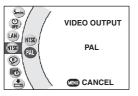
Video Output

This option sets the video format to match that used on the video equipment connected to the camera.

1 From the setup menu, use the jog dial to select [VIDEO OUTPUT] and press the OK button.



Use the jog dial to select [NTSC] or [PAL] and press the OK button.



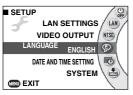
The selected output format is set and the setup menu reappears.

LANGUAGE

This option sets the language used in the screen displays.



From the setup menu, use the jog dial to select [LANGUAGE] and press the OK button.





Use the jog dial to select the language and press the OK button.



The selected language is set and the setup menu reappears.

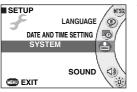
ENGLISH : English 日本語 : Japanese FRANÇAIS : French DEUTSCH : German ESPAÑOL : Spanish 中国語簡体字 : Chinese (Simplified) 中國語繁體字 : Chinese (Traditional)

System

Using the Hard Disk Drive Protection Function

This is a hard disk drive protection function that operates when the camera is dropped in any way. A sensor detects the fact that the camera has been dropped and stops any data writing to the hard disk drive.

- Sudden camera movements during filming or while you are riding in a vehicle can trigger the sensor and stop the camera shooting.
- **1** From the setup menu, use the jog dial to select [SYSTEM] and press the OK button.



The system menu appears.

 Use the jog dial to select [HARD DISK PROTECTION] and press the OK button.



3 Use the jog dial to select [ON] or [OFF] and press the OK button.



The selected option is set and the system menu reappears.

ON : Hard disk drive protection is enabled.

OFF : Hard disk drive protection is disabled.



IMPORTANT

- Even when hard disk drive protection is enabled, mishandling the camera can result in damage to the hard disk drive and/or the loss of saved data. Hard disk drive protection does not guarantee the safety of the hard disk drive or the data stored on it.
- If the camera detects that it has been dropped and stops access to the hard disk drive, the "HARD DISK DRIVE CANNOT BE ACCESSED" message appears. Turn the camera off and then on again.
- If the camera detects that it has been dropped during video recording and stops access to the hard disk drive, the video file may be created incorrectly and you may not be able to play it back. In this event, you should erase the video.

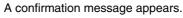
Resetting the System

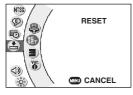
This option returns the camera settings to the values specified at the time of purchase (factory default). Note that this does not reset the settings for Drive & Album, the white balance presets, the LAN settings, or the video output, language and date and time settings.

1 From the setup menu, use the jog dial to select [SYSTEM] and press the OK button.

The system menu appears.

2 Use the jog dial to select [RESET] and press the OK button.







Use the jog dial to select [YES] and press the OK button.



When the reset is completed, the system menu reappears.

Formatting Drives

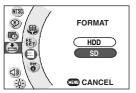
Formatting initializes the hard disk drive or an SD card. Formatting (see "Glossary" D 0.197) completely erases all the images and albums created on the hard disk drive or SD card.

- You should connect the AC adapter when formatting the hard disk drive or an SD card.
- A faulty SD card or hard disk drive cannot be formatted correctly.
- Always format an SD card on the camera before using it for the first time. You should also format SD cards periodically to remove any fragmented files and maximize the available storage capacity.

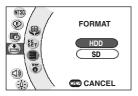
1 From the setup menu, use the jog dial to select [SYSTEM] and press the OK button.

The system menu appears.

2 Use the jog dial to select [FORMAT] and press the OK button.



3 Use the jog dial to select [HDD] or [SD] and press the OK button.



A formatting confirmation message appears.

HDD: Formats the hard disk drive.

SD : Formats an SD card.

4

Use the jog dial to select $[Y \models S]$ and press the OK button.

FORMAT	
FORMATTING THE HARD DISK DRIVE Will delete all the Albums and Files on the Disk.	
YES NO	

A message is displayed.



МЕМО

- The [SD] option can only be selected when there is an SD card in the camera.

M IMPORTANT

• You should periodically format the hard disk drive to ensure that it continues to run smoothly.

See "Using the Hard Disk Drive" D.21.

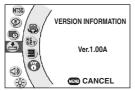
Displaying the Version Information

This option displays the camera's software version information.

1 From the setup menu, use the jog dial to select [SYSTEM] and press the OK button.

The system menu appears.

2 Use the jog dial to select [VERSION INFORMATION] and press the OK button.



The version information appears.

Press the MENU button to return to the setup menu.

Connecting to Other Devices

Connecting to a TV Connecting to a PC Connecting to a DVD Recorder with DVR

Connecting to a TV

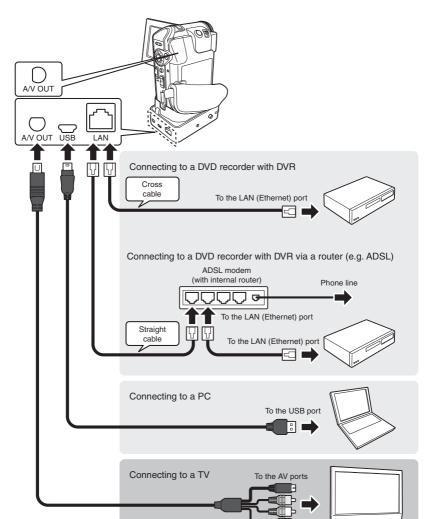
You can connect the camera to a TV and use the TV for viewing and shooting images. The remote control provides a simply way to control the camera when it is connected to a TV.



МЕМО

- When connecting devices together, always ensure that all the devices are turned off. Connecting devices while they are still turned on may disrupt screen display and prevent normal image viewing.
- Select the correct video output for the video device that is connected to the camera.

See "Video Output" 🖈 p.141.



Check that the camera is turned off. When connecting the camera to a TV using the cradle, connect the AC adapter to the cradle before setting the camera in the cradle (🖒 p.30).

When connecting the camera directly to the TV, connect the AC adapter to the camera.

Connecting to a TV for Playback

- Plug the bundled AV cable into the A/V OUT terminal on the cradle or camera.
- Plug the other end of the AV cable into the Audio and video input terminals on the TV.
- Turn on the camera and the TV.



Select the TV input.

The camera image appears on the TV.



Use the jog dial or press the \frown button on the remote control to select the image to be played back.

To play a video, move the OK button to **A** or press the **A** button on the remote control.



IMPORTANT

 When removing the camera from the cradle, always ensure that the camera is turned off first.



MEMO

- · You can shoot with the camera still set in the cradle by switching the camera to recording mode.
- The image prior to shooting may appear slightly blurred when compared with the playback image (due to the lower resolution).
- The camera cannot output images in PAL-format to a video display unit (such as a TV) in recording mode.
- The cradle is not included with the GSC-R30.

Connecting to a PC

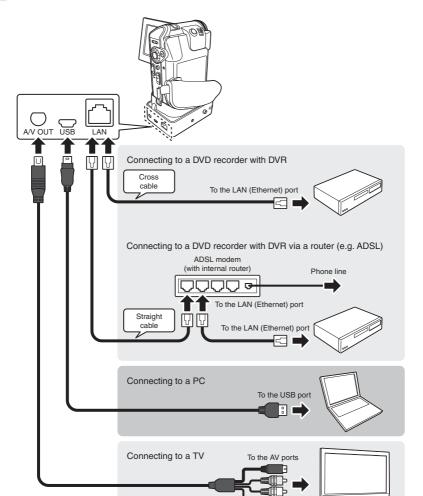
Connecting the camera to a PC enables you to copy or move images on the camera to the PC and record the images on a DVD.

See "Working with Images on Your PC" (D p.155).

Check that the camera is turned off. When connecting the camera to a PC using the cradle, connect the AC adapter to the cradle before setting the camera in the cradle (\square p.30).

When connecting the camera directly to the PC, connect the AC adapter to the camera.

The connection between the camera and the PC is monitored by the "Toshiba Device Detector". If any other connection monitoring tool is running, it may interfere with the correct operation of the "Toshiba Device Detector". When you connect the camera to the PC, shut down any other monitoring tools.



Connect the USB terminal on the cradle to the USB port on the PC with the bundled USB cable.

<For GSC-R30>



The cradle is not included with the GSC-R30. Connect the bundled USB cable directly to the connection terminal on the base of the camera.



Press the USB button on the cradle.

Turn the camera on and start up in USB mode. Install the operating system's standard driver as directed by the on-screen instructions.

Once the camera and PC are connected correctly, either "HIGH SPEED MODE" (see "Glossary" \square p.197) or "FULL SPEED MODE" (see "Glossary" \square p.197) appears on the camera's LCD monitor depending on the connection settings.



IMPORTANT

• When a "FULL SPEED MODE" connection is used, the camera is protected and data cannot be written from the PC to the camera.



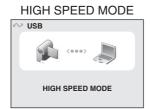
MEMO

- Once the USB driver has been installed, the PC will then automatically recognize the camera when you set it to USB mode.
- When connecting the USB cable, take care that the shape and direction of the cable plugs match their respective sockets.
- Auto power off does not function when the camera is connected to a PC.

HIGH SPEED MODE and FULL SPEED MODE

The connection modes differ depending on the connection environment of the camera and computer.

You can check which mode is used for the connection on the camera's screen.



FULL SPEED MODE



When connected in "FULL SPEED MODE", the camera is in a protected state. As a result, data cannot be written to the camera from a computer. Some ACDSee functions are also unusable.

To connect in "HIGH SPEED MODE", your computer needs to support "USB 2.0". Check your computer before connecting the camera.

Disconnecting the Camera from the PC

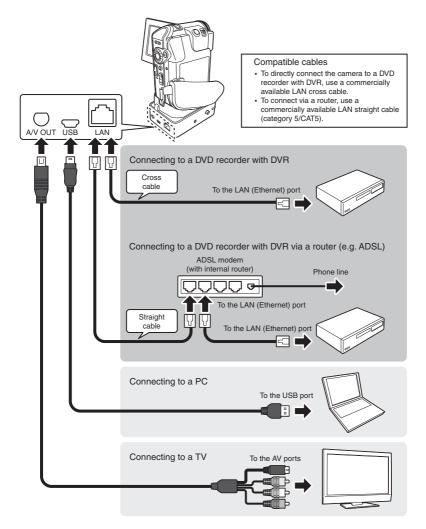
- **1** Click the " **S**" icon in the task tray in the bottom right corner of the PC desktop.
- **2** Follow the disconnection procedure as directed by the on-screen messages. After completing the procedure, disconnect the USB cable from the PC and camera.

Connecting to a DVD Recorder with DVR

Connecting the camera to a DVD recorder with DVR enables you to download videos on the camera to the hard disk drive in the DVD recorder with DVR and to record the videos on a DVD.

See "Transferring Videos to a DVD Recorder with DVR" (p.177).

- You can only connect DVD recorders equipped with the Toshiba "Net Dubbing" function.
- The customer should provide the appropriate LAN cable for the type of connection.



You must specify the LAN settings before connecting the camera to the DVD recorder with DVR.

See "LAN Settings for Connecting to a DVD Recorder with DVR" (\square p.173). Check that the camera is turned off.

Connect the AC adapter to the cradle before setting the camera in the cradle ($\ensuremath{\mathbb{D}}\xspace$ p.30).

1 Plug one end of the LAN cable (sold separately) into the LAN terminal on the cradle and the other end into the Ethernet port or LAN port on the DVD recorder with DVR or the network device port.

The name of the ports on the DVD recorder with DVR may differ according to the model used. If you are connecting the cradle directly to the DVD recorder with DVR with the LAN cable, use a crossover-type LAN cable. If you are connecting via an existing network, refer to the instruction manuals for the connected network device.

2 Turn on the DVD recorder with DVR.

The DVD recorder with DVR starts up. Wait a few moments until the recorder is ready to record or play back images.

3

Press the LAN button on the cradle.

The camera starts up in LAN mode, and the LAN LED on the cradle lights.

Working with Images on Your P

About the Software Supported PCs Installing the Software Viewing Camera Images on a PC Backing up Camera Data Printing Still Images Resizing Images Copying Still Images from a PC to the Camera Writing Print Information on a PC Recording Images onto DVDs

About the Software

This section describes how to install the software bundled with your camera, and briefly explains how to use the software. For basic information on using your PC, refer to the user manuals supplied with the PC or with the operating system software. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

About the Bundled Software

The CD-ROM bundled with the camera includes the software applications described below.

ACDSee[™] 7 for TOSHIBA

In addition to allowing you to view your photographed images on a PC, this software also lets you print, edit and correct your images.

ACDSee is not guaranteed to operate when devices other than this camera are connected. For information on other supported devices or for further information on using ACDSee, contact the Toshiba Customer Service Department (for U.S.A.), Toshiba Customer Support Department (for Canada) or ACD Systems online support. ACD Systems online support: http://www.acdsystems.com/support/index

 PowerProducer[™] 3 for TOSHIBA This software enables you to edit your photographed images and use them to create DVDs.

It provides all the functions necessary for writing DVDs, including image importing, editing, menu generation and writing to disc. Smart Video Rendering Technology (SVRT) provides highspeed rendering while retaining excellent image guality. PowerProducer 3 for TOSHIBA also works seamlessly with ACDSee to make viewing, creating and writing to disc a single smooth operation. PowerProducer[™] 3 for TOSHIBA also carries the "DVD authoring logo", so it is compatible with consumer DVD players. The "DVD authoring logo" (DVD-Video logo for PC Authoring) is regulated by the DVD Forum and verifies that the DVD is authored in accordance with the DVD-Video standard. This attests to the fact that the created DVDs conform to the DVD-Video standard.



PowerProducer[®] 3



For more information on using PowerProducer 3, contact a Toshiba Customer Service Department (for U.S.A.), Toshiba Customer Support Department (for Canada) or ACD Systems online suport.

ACD Systems online support:

http://www.acdsystems.com/support/index

Supported PCs

Connecting the camera to a PC enables you to transfer your photographed images to the PC, edit the images, send them to your family and friends via the Internet, or burn them porto a DVD.

System Requirements for Connected PCs

PCs connected to the camera must conform to the system requirements shown below. Check your system before connecting the camera.

Software system requirements

OS*1	Windows [®] 2000 Professional, Windows XP Home Edition or Windows XP Professional	
CPU	700MHz Pentium [®] III or better (2GHz Pentium 4 or better recommended)	
RAM	128MB or better (256MB or better recommended)	
Hard disk drive capacity	ACDSee 7 for Toshiba : Min. 100MB (for installation) PowerProducer 3 for Toshiba : Min. 550MB (for installation) Minimum 5GB required for DVD writing	
Display	Display adapter with 1024×768 or better and 16-bit High Color or better (True Color recommended)	
Interfaces	USB 1.1 ^{*2} or USB 2.0 installed in the PC (USB 2.0 recommended)	
Supported media	Depending on the drive used for authoring: DVD-Video: DVD-R/-RW, DVD+R/+RW/+R DL DVD-VR : DVD-RW, DVD-RAM DVD+VR : DVD+R/+RW Data : DVD-R/-RW, DVD+R/+RW/+R DL, DVD-RAM, CD-R ^{*3}	
Supported drives	For information on recommended drives, refer to the PowerProducer 3 "Readme" file. For the latest drive information, contact a Toshiba Customer Service Department or Toshiba Customer Support Department.	
Other	Microsoft Internet Explorer 5.5 or later*4, Microsoft Direct-X 9 or later	

1: In each case, only PCs with pre-installed operating systems are supported. Operation is not guaranteed on upgraded PCs. Macintosh computers are not supported. Note also that operation is not guaranteed on all PCs.

2: Data cannot be written from a PC to the camera when a USB 1.1 connection is used.

3: Video CDs and SVCDs cannot be created.

*4: If Microsoft Internet Explorer 5.5 or later is not installed, installation of the bundled software will not be completed. Before installing the bundled software, install Microsoft Internet Explorer 5.5 or later.

For information on installing Microsoft Internet Explorer, visit the Microsoft website.

About the File Configuration

When you connect the camera to a PC, images shot using the camera appear as follows:

[XXXTOSHI]

This denotes that the images in the folder were shot using a Toshiba camera. A folder number between 100 and 999 is allocated according to the circumstances.

Still images

File names are in the GSC_XXXX.jpg format (where XXXX is a number between 0001 and 9999). The ".jpg" file extension indicates that the image is a JPEG-format (see "Glossary" ▷ p.198) file.

Photographed images are saved in the Exif format (see "Glossary" \square p.197).

Videos (with sound)

File names are in the GSC_XXXX.mpg format (where XXXX is a number between 0001 and 9999). The ".mpg" file extension indicates that the video is an MPEG-format (see "Glossary" \Rightarrow p.198) file.

The ".thm" file extension indicates that the file is a video thumbnail.

System files

The ".xml" file extension indicates that the file contains information on the connection between the camera and the PC.



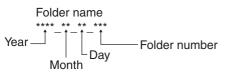
IMPORTANT

• ".xml" files contain album information.

Deleting an ".xml" file will cause part of the software to malfunction. Do not delete ".xml" files.

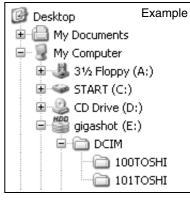
Folder Configuration for Image Backups

When you back up your camera images onto a PC, the images are stored in the "My Pictures" folder in the configuration shown below.



The names of the folders created inside My Pictures include data such as the camera model and image information. When you use the synchronize function to back up images to a PC, these folder names are used as keywords. For this reason, you should not change the folder configuration or the names of the saved image files.





Installing the Software

nstall ACDSee and PowerProducer from the supplied CD-ROM. The supported operating systems are Windows XP and Windows 2000.

- Any loss of power to the camera while images are transferring may corrupt the data. When you connect the camera to PC, it is recommended that you use the AC adapter.
- ACDSee and PowerProducer must be installed at the same time. Uninstalling only either one will cause improper functioning.
- **1** Insert the bundled CD-ROM into the CD-ROM drive on your PC.

2 Click the [ENGLISH] icon.

Toshiba Installer	
	C ENGLISH
TOSHIBA	@ FRANCAIS
• gigashot	a contras
Application Installer	C DEUTSCH
No. ocdsee7 PoverProducer' 3	C ESPAÑOL
fer TOSHIBA	an excention
	@ 服務中支援
	· \$24726

If this window does not open, double-click "Setup.exe" on the CD-ROM.

Click the [acdsee7 PowerProducer 3] icon.

🕂 Tashiba Installer	
	TOSHIBA • gigashot Application installer
PowerProducer' 3	
	e bit

Setup begins.

Install the software as directed by the on-screen instructions. When installation ends, the ACDSee and PowerProducer icons appear on the desktop.

A Restart your PC.

Viewing Camera Images on a PC

Use this procedure to display your photographed images on the PC.

1

Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" rightarrow p.150.



Click [View data using ACDSee].

ACDSee starts up.

Use this to select the camera drive (hard disk drive or SD card).



МЕМО

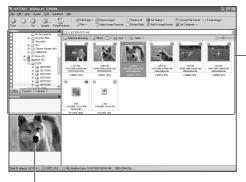
- When you connect the camera to the PC, the camera's built-in hard disk drive is displayed on the PC as "gigashot internal drive" and the SD card is displayed as a "gigashot SD card".
- You can also launch the gigashot backup tool by clicking "gigashot Backup Tool" from the "Acquire" icon in ACDSee.
- The gigashot backup tool can be started up if the "Toshiba Device Detector" is displayed in the Windows taskbar. If the "Toshiba Device Detector" is not displayed, click the "Toshiba Device Detector" from the "Acquire" icon in ACDSee.



IMPORTANT

• Always play gigashot videos in ACDSee or PowerProducer. The videos may not play correctly in other software applications.

ACDSee Main Window



The left side of the window shows the folder view while the right side shows the contents of the folder currently being browsed. The final icon is displayed for still images and the final icon for videos.

Shows a preview of the image selected in the top-right of the screen.

Backing up all the Data on the Camera to a CD or DVD

This function backs up (copies) all the data on the camera's hard disk drive to a CD or DVD.

Because you cannot select the data to be backed up, note the capacity of the CD or DVD on which the data will be saved.

You cannot use this function to back up data on an SD card.

Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" ▷ p.150.

2

Click [Backup data to CD/DVD].

The "Create Disc Wizard" appears.



Complete the disc label and then click the [Next] button.

Disc label:	25/0 Dates in a cont
vive status	
Disc writer :	MATSHITA UJDANO DVD/CDRW (D)
Set the write s	peed for the drive.
Note: Selecting increase total	any of the Features will generate additional files and size of source files.
Write speed	24x (8800 KB/s) 💌
Total cite of cou	Ince files: 1MB Available disc space: 695MB

"Disc writer" and "Write speed" can also be set.

4 Click the [Next] button.

Data writing begins. When the data cannot be stored on a single CD or DVD, a message will be displayed. Follow the instructions to replace the CD or DVD. When writing ends, a completion message appears.



Click the [Finish] button.

The ACDSee main window appears.



IMPORTANT

- Use a CD or DVD that has nothing recorded on it.
- When backing up to several CD's or DVD's, be sure to use CD's or DVD's that are the same.
- Data will be backed up in the same order as recorded on the camera.
- A single continuation of data that exceeds a CD's or DVD's capacity cannot be backed up.

Using the Synchronize Function to Back Up Data to a PC

Use this procedure to back up your photographed images onto the hard disk drive in a PC. Because it synchronizes the data on the PC and camera, it can back up the latest data on your camera. Note that this function only works with the data on your camera's hard disk drive.

1	Select	USB	mode.

The gigashot backup tool starts up. See "Connecting to a PC" rightarrow p.150.

Click [Backup data to PC using synchronization].



The "Toshiba Synchronization Wizard" window opens.

3 Click the [Next] button.

🕫 Toshiba Synchronization Wizard 🛛 🕅
Select a Folder Browse to a folder on your hard drive in which to save your image and movie Res. The weard will create a new subfolder for each folder on the camera.
Eolder:
Documents and Settings(dynabook)(My Documents)(My Rictures)(Toshiba MDW10.2/D0392
Browse
<gad. bent=""> Cancel</gad.>

Specify a save folder other than the folder shown, click the [Browse] button.

The folder browsing window opens. Specify the folder to be used for saving the data and click the [OK] button. The data in the specified folder will now be synchronized with the data on the camera.



Select the folder to be copied and click the [Next] button.

Each folder on camera : Selects all the saved folders on the camera. Specified camera folder : Selects folders to be copied.

If you have ticked the [Delete files from camera after synchronizing to hard drive] checkbox, the data on the camera is deleted after synchronization ends. Note that you cannot use this function with a "FULL SPEED MODE" connection.

Synchronization begins. A completion message is displayed when synchronization ends.

5 Click the [Finish] button.

The ACDSee main window appears. If the [Open ACDSee and browse synchronized files] checkbox is not ticked, ACDSee does not start up.

Using a DVD Creation List to Create DVDs

You can use a DVD creation list (p.127) to quickly and easily author your own DVDs.

Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" D p.150.

2

Click [Create a DVD-Video using DVD creation list].



"PowerProducer 3" starts up and project loading begins. Once loading is completed, the "Author" window opens. You can use the Authoring window for tasks such as adding videos and still images, changing the menu background image and adding background music.

Shows the still image selected as the menu background screen during the creation of the DVD creation list.



Click the [] button.



The "Final Output" window opens.



Click the [] button.

Data writing begins. When data writing is completed, a completion window opens.



MEMO

 Do not erase images set to the DVD creation list. If you have accidentally erased images, create the DVD creation list again.

Using the Import Wizard to Back Up Data to a PC

Use this procedure to back up selected data from the camera's hard disk drive and SD cards onto a PC.



Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" rightarrow p.150.



Click [Backup data using Acquire Wizard].

ACDSee starts up and the "Acquire Wizard" window opens.

3 Click the [Next] button.

Welcome to the Acquire Wiza

Sin this step peut time

Ś

The window for selecting files opens.





The "Output Options" window opens.

Set the options and click the [Next] button.

cquire Wizard	
	late to use when naming your acquired images, and where to goar hard drive.
File names	
⊙ Keep original	fle names
O Bename files	using template:
Template:	<image: date="" original="" time="">_####</image:>
Sample:	6-28-2005 8-59-31 AM_0001
Destination folder	
Locations	My Ritures Browse
⊆reate subfolder	2005-06-20
eleter inages fr	tate images om device after placing on hard drive
	< gack. Next > Cancel Help

The "Copy Files" window opens. A completion window appears when copying ends.



Click the [Finish] button.

Printing Still Images

You can use this procedure to do things such as inserting the date on your prints or to print multiple images on a single page. If your printer supports PictBridge, you can also print directly from the camera to the printer.

Printing

- **1** With your images open in ACDSee, select the image to be printed and click [Print] in the [File] menu.
- **2** Specify settings such as the paper size and number of prints and then click [Print].



Printing begins.

Printing with the Camera Connected Directly to the Printer

With printers that support PictBridge, you can connect the camera directly to the printer to print your images.

See "Printing Directly from the Camera Using PictBridge" \Rightarrow p.122.

Resizing Images

You can use this procedure to make image smaller so that you can attach them to e-mail messages, etc.

1 With your images open in ACDSee, click the image to be resized to select it.

Click [Resize Images] in the [Tools] menu.

The image resize window opens.

3 Check that [Size in pixels] is selected, enter the desired numbers in the [Width] and [Height] fields and then click [Start Resize].

Resize Images
Resize Images Choose the settings for the resize operation.
Organicoji di vogod Obstatuani Openiteriji se jeste iza je jest no Politika i di operatori Politika i di operatori Jeste i di operatori Jeste i di operatori
(3550%) (2017.Rese) (2001 Heb

Click [Done].

Resizing begins.

Ticking the [Preserve original aspect ratio] checkbox allows you to resize images without changing its aspect ratio.

When [Percentage of original] is selected, you can specify the new image size as a percentage (%). When [Actual/Print size] is selected, you can specify the printed image size in "inches", "cm" or "mm".



IMPORTANT

• If you directly resize an image that is saved on the camera, you may not be able to view the resized image on the camera.

Copying Still Images from a PC to the Camera

Use this procedure to copy images saved on a PC to the camera's hard disk drive.



IMPORTANT

 With a "FULL SPEED MODE" connection, this function cannot be used because the camera is protected. Check the connection settings and your PC.

Turn on the PC and the camera.

Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" D p.150.

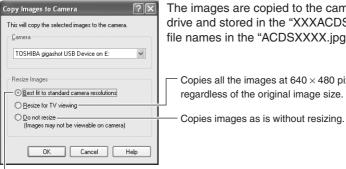
Click [View data using ACDSee].

ACDSee starts up.

4

Select the images you want to copy to the camera and click [Copy to Camera] in the [Create] menu.

Select the image conversion size and click [OK].



The images are copied to the camera's hard disk drive and stored in the "XXXACDSE" folder under file names in the "ACDSXXXX.jpg" format.

Copies all the images at 640×480 pixels,

The sizes of the resized images vary depending on the source image size. Images larger than 640 × 480

Images are resized to 1024×768 . Where the original image is smaller than 1024×768 , a black border appears around the image.

Images smaller than 640×480

Images are resized to 640×480 . Where the original image is smaller than 640×480 , a black border appears around the image.



MEMO

- If you select "Do not resize", you may not be able to view some image sizes correctly on the camera.
- You may be unable to display copied images that were not shot on this camera.

Writing Print Information on a PC

This function allows you to write print information for photographed images from a PC and then save the information on an SD card in the camera.



IMPORTANT

• With a "FULL SPEED MODE" connection, this function cannot be used because the camera is protected. Check the connection settings and your PC.

Turn on the PC and the camera.

Select USB mode.

The gigashot backup tool starts up. See "Connecting to a PC" \square p.150.

Click [View data using ACDSee].

ACDSee starts up.

- **3** With your images open in ACDSee, select the images you want to write print information for.
- Click [DPOF Manager] in the [Create] menu.

The DPOF Manager window opens.

5 Specify the print information (number of prints and date printing).



Click [Store to device].

The DPOF settings file for the selected images is copied to the SD card in the connected camera.

Recording Images onto DVDs

Use this procedure to record still images and videos onto a DVD. Still images are recorded onto a DVD as a slideshow.

- **1** With your images open in ACDSee, select the images and videos you want to record onto DVD.
- **9** Click [PowerProducer] in the toolbar.
- **3** Select [DVD] as the disc type, set the [Disc Type], [Disc Capacity], [Location], [Video Quality] and [Audio Quality] options and then click the [OK] button.



PowerProducer 3 starts up and the "Author" window opens. You can use this window for tasks such as adding videos and still images, changing the menu background image and adding background music.

Disc Type : DVD DVD+VR DVD-VR Disc Capacity: 1.4 GB 4.7 GB 8.5 GB Location : NTSC PAL Video Quality : HQ (high quality) SP (standard) LP (long playback) EP (economy) Audio Quality : LPCM **Dolby Digital**

Insert a DVD into the drive on the PC and click the [---] button.

The "Final Output" window opens.

5 Check that the drive containing the inserted DVD is shown in the [Current drive] field and that [Burn to disc] checkbox is ticked. Then click the [___] button.

Disc creation begins.

- You can specify up to 256 images in each slideshow. If you selected more than 256 images in step 1, the 257th and subsequent images are used to create a separate slideshow.
- To edit a slideshow, launch PowerProducer and then select [Photo Slide Show] in the [Edit] menu.
- To edit a video, launch PowerProducer and then select [Video clips] in the [Edit] menu.
- For more detailed information on recording and editing DVDs, refer to the PowerProducer Help.
- If you selected [DVD+VR] or [DVD-VR] as the [Disc Type], you cannot select [8.5 GB] as the [Disc Capacity].
- The original files for still images are also stored on the DVD and can be viewed on a PC.

Connecting to a DVD Recorder with DVR

LAN Settings for Connecting to a DVD Recorder with DVR Transferring Videos to a DVD Recorder with DVR

LAN Settings for Connecting to a DVD Recorder with DVR

Use this procedure to connect the camera to a DVD recorder with DVR via a LAN (see 'Glossary") p.198). Before you connect the camera to the DVD recorder with DVR, you must specify the LAN settings on the camera. Note that the settings differ depending on the connection method used.

Supported DVD Recorders with DVR

You can only connect DVD recorders equipped with the Toshiba "Net Dubbing" function.

Settings for Connecting the Camera to a DVD Recorder with DVR via an Existing Network

CAMERA NAME

: Enter the name used to identify the camera on the network. You can enter any name you like, or you can simply use the default name. The name can consist of up to 15 half-pitch alphanumeric characters.

GROUP NAME

: Enter the name given as the "GROUP NAME" for the DVD recorder with DVR. To find the "GROUP NAME" for the DVD recorder with DVR, refer to the instruction manual supplied with the DVD recorder with DVR. (The name for "GROUP NAME" may differ depending on the recorder used.)

Because the password field is blank by default, you must enter a password. The password can consist of up to 16 half-pitch alphanumeric characters.

PASSWORD

: Enter the name given as the "GROUP PASSWORD" for the DVD recorder with DVR. To find the "GROUP PASSWORD" for the DVD recorder with DVR, refer to the instruction manual supplied with the DVD recorder with DVR. (The name for "GROUP PASSWORD" may differ depending on the recorder used.)

Because the password field is blank by default, you must enter a password. The password can consist of up to 16 half-pitch alphanumeric characters.

IP CONFIG: DHCP (recommended) (see "Glossary" ip p.197)

If you cannot connect using the above settings, set [IP CONFIG] to [MANUAL] and then specify the settings given below.

IP ADDRESS

- : Set a different address within the same subnet and the connected network settings.
 - E.g. Where the router address is 192.168.1.1, the camera address can be 192.168.1.6 or 192.168.1.20, etc.

Ensure that you do not set the same IP address (see "Glossary" rightarrow p.197) as another device.

ROUTER : Enter the IP address of the router (see "Glossary" D p.197). To find the router's IP address, refer to the instruction manual supplied

Settings for Connecting the Camera Directly to a DVD Recorder with DVR via a LAN Cable

CAMERA NAME

: Enter the name used to identify the camera on the network. You can enter any name you like, or you can simply use the default name. The name can consist of up to 15 half-pitch alphanumeric characters.

GROUP NAME

: Enter the name given as the "GROUP NAME" for the DVD recorder with DVR. To find the "GROUP NAME" for the DVD recorder with DVR, refer to the instruction manual supplied with the DVD recorder with DVR. (The name for "GROUP NAME" may differ depending on the recorder used.)

Because the password field is blank by default, you must enter a password. The password can consist of up to 16 half-pitch alphanumeric characters.

PASSWORD

: Enter the name given as the "GROUP PASSWORD" for the DVD recorder with DVR. To find the "GROUP PASSWORD" for the DVD recorder with DVR, refer to the instruction manual supplied with the DVD recorder with DVR. (The name for "GROUP PASSWORD" may differ depending on the recorder used.)

Because the password field is blank by default, you must enter a password. The password can consist of up to 16 half-pitch alphanumeric characters.

IP CONFIG: MANUAL

IP ADDRESS

- : Set a different address within the same subnet as the DVD recorder with DVR.
 - E.g. Where the DVD recorder with DVR address is 192.168.1.10, the camera address can be 192.168.1.15 or 192.168.1.20, etc. Ensure that you do not set the same IP address as the DVD recorder with DVR.
- NETMASK : Set the subnet mask for the connected network. 255.255.255.255.0 (recommended)

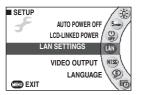
ROUTER : Any

(kay)

IMPORTANT

- Toshiba recommends that you take the following minimum general security precautions in connection with choosing a GROUP NAME and PASSWORD when connecting the camera to a DVD recorder with DVR:
 - Choose a unique GROUP NAME and PASSWORD that would be difficult for someone else to guess (e.g., do not use the same PASSWORD that you use for your email account, router, etc.).

• Do not share your GROUP NAME and PASSWORD with anyone. On some models of Toshiba DVD recorder with DVR, "TOSHIBA" (half-pitch uppercase letters) is set as both the default group name and the group password. If you continue to use the default settings on a Toshiba DVD recorder with DVR, (you can also set "TOSHIBA" as the group name and password for the camera), it is strongly recommended that you set new group names and passwords to From the setup menu, use the jog dial to select [LAN SETTINGS] and press the OK button.



2 Use the jog dial to select the setting to be changed and press the OK button.

LAN SETTINGS	
CAMERA NAME	GSC-R60
GROUP NAME	
PASSWORD	
IP CONFIG	DHCP
ОК	CANCEL
SELECT CHANGE	



Move the OK button to \blacktriangleleft or \blacktriangleright to move the cursor and use the jog dial to enter text.

LAN SETTINGS		
CAMERA NAME	GSC-R60	
GROUP NAME	_	
PASSWORD		
IP CONFIG	DHCP	
CHARACTER TYP	E ODELETE	
C SELECT	OK OK	

Move the OK button to \blacktriangle to switch between uppercase and lowercase letters.

Move the OK button to $\mathbf{\nabla}$ to delete the character in the cursor location.

When you have finished entering text, press the OK button.

When you have completed all the settings, use the jog dial

to select [OK] and press the OK button.

LAN SETTINGS		
CAMERA NAME	GSC-R60	
GROUP NAME	TOSHIB <u>A</u>	
PASSWORD		
IP CONFIG	DHCP	
CHARACTER TYPE	DELETE	
SELECT	OK OK	

5

LAN SETTINGS CAMERA NAME GSC-R60 GROUP NAME TOSHIBA PASSWORD ******** IP CONFIG MANUAL OK CANCEL

If the IP CONFIG setting is [DHCP], this completes the settings.

If the IP CONFIG setting is [MANUAL], proceed to step 6.

6 Use the jog dial to select the setting to be changed and press the OK button.

	IF	P CONFIG
Þ	IP ADDRESS	192. 168. 1. 20
	NETMASK	255. 255. 255. 0
	ROUTER	192. 168. 1. 1
	MAC ADDRESS	00 08 0D 59 D3 3E
	ОК	CANCEL
ō	SELECT	CHANGE

Move the OK button to ◀ or ▶ to move the cursor and use the jog dial to enter text.

					_
IP	CON	FIG		_	
IP ADDRESS	192.	168.	1.	20	
NETMASK	255.	255.	255.	0	
ROUTER	192.	168.	1.	1	
MAC ADDRESS	00 00	8 OD 5	9 D3 (3E	
ОК	\supset (CAI	ICEL	\mathbf{D}	
C SELECT	(🖪 CH	ANGE		

Move the OK button to to switch between uppercase and lowercase letters.

Move the OK button to **v** to delete the character in the cursor location.

8 When you have finished entering text, press the OK button.

	P CONFIG
IP ADDRESS	192. 168. 1. 22
NETMASK	255. 255. 255. 0
ROUTER	192. 168. 1. 1
MAC ADDRESS	00 08 0D 59 D3 3E
ОК	CANCEL
C SELECT	OB CHANGE



 $oldsymbol{g}$ When you have completed all the settings, use the jog dial to select [OK] and press the OK button.

IP CONFIG							
IP ADDRESS	192.	168.	1.	22			
NETMASK	255.	255.	255.	0			
ROUTER	192.	168.	1.	1			
MAC ADDRESS 00 08 0D 59 D3 3E							
ОК		CAN	ICEL	\mathbf{D}			

Transferring Videos to a DVD Recorder with DVR

Use this procedure to connect the camera set in the cradle to a DVD recorder with DVR and transfer videos. This function allows you to save videos shot using the camera to a DVD recorder with DVR.

Supported DVD Recorders with DVR

You can only connect DVD recorders equipped with the Toshiba "Net Dubbing" function.

Transferring Videos to a DVD Recorder with DVR

Connect the AC adapter to the cradle before setting the camera in the cradle $(\square p.30)$.

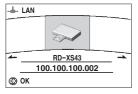
Connect the cradle to a DVD recorder with DVR or network device with a LAN cable (sold separately) (\square p.153).

1 Turn on power to the DVD recorder with DVR. Once it becomes possible to record or playback, press the cradle's LAN button.

The camera starts up in LAN mode, and the LAN LED on the cradle lights.

2 Use the jog dial to select the DVD recorder you want to connect to and then press the OK button.

The "LAN" screen appears.





Use the jog dial to select [SELECT FILE] and press the OK button.

The camera images are displayed.



4

with DVR and press the OK button.



The [**C**] icon appears below the selected image. To cancel transferring of the image, press the OK button again.

To transfer multiple images, simply repeat this procedure.



Move the OK button to $\mathbf{\nabla}$ to select [OK] and press the OK button.

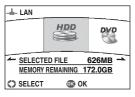
6

Use the jog dial to select [RD DRIVE] and press the OK button.



Vise the jog dial to select [HDD] or [DVD] and press the OK button.

DVD recorder with DVR.





Use the jog dial to select [TRANSFER] and press the OK button.



Transferring begins.

To cancel transferring in progress, press the MENU button.

If you selected "DVD", load a recordable DVD into the

When transferring ends, the "LAN" screen reappears. Press the [POWER] button on the cradle and turn off the camera.

Confirming Images in Enlarged View

In step 4, slide the zoom lever towards T.

Sliding towards W in enlarged view will return to the select images to transfer screen.

Transferring all Images in an Album

In step 4, move the OK button to $\mathbf{\nabla}$ to select [SELECT ALL], then press the OK button.



MEMO

- You can set the camera's power to automatically go off after transfer is completed, by sliding the POWER switch on the camera or pressing the POWER button on the cradle during transfer. "POWER OFF" will be displayed on the camera's LCD monitor.
- Transferred images are saved in the "gigashot" folder on the DVD recorder with DVR.

Appendix

Specifications Troubleshooting Error Messages Glossary Index

Specifications

Image sensor	1/3.6-inch CCD sensor Total pixels: 2.12 million Effective pixels: Still image approx. 2 million, video approx. 1.25 million		
Lens	Optical 10X zoom lens, f/1.8 (wide-angle) - f/2.2 (telephoto) Focal length: f = 4.5-45.0 mm (with 35 mm camera: 48.7-487 mm, for 2M still image 38.9-389 mm)		
Shooting range	Standard: Approx. 0.1 m to infinity (wide-angle), approx. 1.2 m to infinity (telephoto) Macro: Approx. 1 cm to infinity (wide-angle), approx. 1.2 m to infinity (telephoto)		
LCD monitor ^{*1}	2.5-inch diagonal TFT color LCD Pixels: 207,000 (862 × 240)		
Focus control method	TTL contrast-detection AF		
Exposure control mode	Program AE		
Metering mode	TTL zoned metering Metering modes: Center-weighted, Spot		
Exposure bias	-2.0 to +2.0 EV (in 1/3-EV increments)		
Still photography sensitivity	Manual: ISO100, 200 equivalents Auto: ISO100-200 equivalents		
Shutter speeds	Videos: 1/7.5 to 1/10000 sec. Still images: 8 to 1/1000 sec. (combination electronic and mechanical shutter)		
Flash	Firing modes: Auto (fires automatically in low light), Red-eye reduction (fires automatically in low light), Forced flash, Suppressed flash Effective range: Approx. 0.5 to 2.5 m (telephoto at ISO200)		
White balance	Auto, Sunlight, Cloud, Fluorescent light 1, Fluorescent light 2, Incandescent lamp, Preset		
Self-timer	2 sec. or 10 sec.		
Digital zoom	4× or 20×		
I/O terminals	Camera: Connection terminal, A/V OUT terminal, DC IN 10 V terminal Cradle: Connection terminal, LAN terminal, USB terminal, A/V OUT terminal, DC IN 10 V terminal		
Power supply	Dedicated rechargeable lithium-ion battery, AC adapter (SQPH20W10P-02)		
Recording media	Hard disk drive: 60GB*2 (GSC-R60) or 30GB*2 (GSC-R30) SD Memory Cards: 128MB, 256MB, 512MB, 1GB or 2GB supported		

Videos	Recording format: MPEG-2 PS Recorded pixels: 720 × 480 (LP: 352 × 480) Audio: Dolby Digital, 48kHz, 16-bit, stereo, 192/384kbps
Still images	Recording format: JPEG (Exif 2.21, DCF 1.0-compliant) Recorded pixels: 2M (1600 \times 1200), 1.2M (1280 \times 960) or 0.3M (640 \times 480)
Operating environment	Temperature: +41°F (+5°C) to +104°F (+40°C) (running), -4°F (-20°C) to +140°F (+60°C) (stored) Humidity: 30% to 80% RH (running, no condensation)
Dimensions	GSC-R60: 2.0 inches \times 4.7 inches \times 2.8 inches (50.7 mm \times 119.0 mm \times 70.5 mm) (W \times H \times D) (excluding attachments) GSC-R30: 1.9 inches \times 4.7 inches \times 2.8 inches (47.7 mm \times 119.0 mm \times 70.5 mm) (W \times H \times D) (excluding attachments)
Weight	GSC-R60: Approx. 14.5 oz (410 g) (excluding battery and SD card) GSC-R30: Approx. 13.8 oz (390 g) (excluding battery and SD card)

- *1: The LCD monitor contained in this camera is manufactured using an extremely high level of precision technology; however, there may be an occasional pixel (dot of light) that does not operate properly (e.g., does not light, remains constantly lit, etc.). This is a structural property of LCD technology, is not a sign of malfunction, does not affect continued operation of the LCD monitor, and is not covered under your warranty.
- *2: 1GB = 1 billion bytes. Actual formatted capacity may be less.
- This model complies with the above specifications.
- Designs and specifications are subject to change without notice.
- This model may not be compatible with features and/or specifications that may be added in the future.

Troubleshooting

If an error or fault occurs, first check the error message displayed on the screen (\Box 0.195) and the status of the LEDs (\Box p.25). Then refer to the information given below.

Problem	Cause	Solution	Page
Power/Prepar	ation		
I can't charge the battery.	The battery is not loaded in the correct direction.	Reload the battery correctly.	28
	The AC adapter is not connected.	Connect the AC adapter.	30
	The camera is not set in the cradle properly.	Set the camera in the cradle correctly.	30
	The camera is turned on.	Turn the camera off.	34
	The camera or battery is overheated.	Allow the camera or battery to cool fully before charging.	30
The camera won't turn on.	The battery is not loaded in the correct direction, or the AC adapter is not connected.	Reload the battery correctly. Connect the AC adapter.	28 30
	The battery is out of charge.	Charge the battery.	30
	The battery has reached the end of its service life.	Replace it with a new battery.	28
The camera	The battery is out of charge.	Charge the battery.	30
runs out of power too quickly.	The terminals are soiled.	Wipe the terminals on the battery and in the camera with a clean, dry cloth.	32
	The battery has reached the end of its service life.	Replace it with a new battery.	28
The camera suddenly lost power.	The Auto power off function was activated.	Turn the camera back on. Change the Auto power off settings.	34 139
Auto power off	Auto play is running.	Stop Auto play.	111
does not work.	You are connected to a DVD recorder with DVR, computer, or printer.	Auto power off is not available when connected to a DVD recorder with DVR, computer, or printer.	139
	The camera is in LAN mode.	Change the mode.	26
	The camera is connected to a printer with PictBridge.	Exit PictBridge.	123

Problem	Cause	Solution	Page
The date and time are wrong.	The camera was left for a long period with the battery removed or the AC adapter disconnected.	Reset the date and time.	35
	The camera was not started up or shut down correctly.	Reset the date and time.	35
I can't create albums.	There is no available space on the recording destination drive.	Use another SD card. Change the destination drive. Erase some images. Edit one or more videos. Move some images to a different drive or onto a PC or DVD, etc.	33 74 130 124 162
	There is already an album numbered "999" on the recording destination drive.	Use another SD card. Change the destination drive. Erase album no. 999.	33 74 132
The SD card is not	The SD card terminals are soiled.	Wipe the SD card terminals with a clean, dry cloth.	-
recognized.	The SD card is damaged.	Use another SD card.	33
The LCD monitor is difficult to see.	The LCD monitor brightness setting is wrong.	Specify an "LCD BRIGHTNESS" setting that makes the LCD monitor easier to see.	96
Resetting does not restore some settings.	-	Resetting does not restore the default settings for Drive & Album, the white balance presets, the LAN settings, or the video output, language and date and time settings.	144

Problem	Cause	Solution	Page
Operation			
None of the buttons work.	A system error has occurred.	Slide the POWER switch across and hold it in place for at least 5 seconds. Note that this may result in the loss of any files that are being created. Settings such as the date and time may also revert to their default values. In this event, reset the settings before using the camera again.	34
Operation is slow.	Too many images are stored on the hard disk drive.	Erase some images. Edit some videos. Move some images to a different drive or onto a PC or DVD, etc.	130 124 162
The remote control does not work.	The remote control battery is not loaded in the correct direction.	Load the battery correctly.	39
	The battery in the remote control is flat.	Fit a new battery.	39
	You are outside the effective range.	Use the remote control at a distance of up to around 4 meters and at an angle of up to roughly 25° left or right of the camera.	39
	There is a strong light shining on the remote control sensor.	Avoid shining strong light directly at the remote control sensor.	39

Problem	Cause	Solution	Page
Photography			
I can't select some of flash	The scene setting is not [AUTO].	In scene settings other than [AUTO], flash use is restricted.	58
settings.	Continuous recording is set to [CONTINUOUS RECORDING] or [AEB].	Select the [1 SHOT] continuous recording setting.	76
The camera will not focus.	The focus setting does not match the distance to the subject.	Select the correct focus setting for the distance to the subject.	62
	You are using the zoom to shoot a subject that is close to the camera.	Cancel the zoom setting.	50
There are vertical streaks on the image.	You are taking a picture of a light source (electric bulb, candle, etc.).	This is a phenomenon called "smear" and is not a fault with the camera.	198
I can't shoot images.	[SD] is specified as the recording destination drive but there is no SD card inserted.	Insert an SD card. Change the destination drive.	33 74
	[SD] is specified as the recording destination drive but the SD card is locked.	Unlock the SD card. Use another SD card. Change the destination drive.	22 33 74
	There is no available space on the recording destination drive.	Use another SD card. Change the destination drive. Erase some images. Edit one or more videos. Move some images to a different drive or onto a PC or DVD, etc.	33 74 130 124 162
	The number of images has reached 32,000.	Change the destination drive. Erase some images. Move some images to a different drive or onto a PC or DVD, etc.	74 130 162
	The recording destination drive is not formatted.	Use another SD card. Change the destination drive. Format the destination drive.	33 74 145
	The recording destination drive is damaged.	Use another SD card. Change the destination drive. If the hard disk drive is damaged, consult the Toshiba Customer Service Department or Toshiba Customer Support Department.	33 74 -
	You tried to shoot while the camera was preparing to shoot (during startup, recording or flash charging).	Wait until preparation is completed before trying to shoot.	_

Problem	Cause	Solution	Page
The flash does not fire.	The flash is set to [SUPPRESSED FLASH].	Set the flash to a different setting.	60
	The flash is set to [AUTO] or [RED-EYE REDUCTION], but the flash does not fire because the surroundings are too bright.	Set the flash to [FORCED FLASH]. In the [AUTO] and [RED-EYE REDUCTION] settings, the flash does not fire in bright situations.	60
	The scene setting is [LANDSCAPE], [SPORTS] or [SUNSET].	Select a different scene setting (not [LANDSCAPE], [SPORTS] or [SUNSET]).	58
	You shot a still image during video recording.	You cannot use the flash when shooting still images during video recording.	67
	Continuous recording is set to [CONTINUOUS RECORDING] or [AEB].	Select the [1 SHOT] continuous recording setting.	76
I can't shoot still images during video recording.	There is less than 10 seconds of available video recording time left.	You cannot shoot still images during video recording when there is less than 10 seconds of available video recording time left.	67
	An image with the file number "9998" or "9999" exists.	Stop video recording and create a new album before trying to shoot still images.	72
Video recording suddenly stopped.	There is no more space available on the recording destination drive.	Use another SD card. Change the destination drive. Erase some images. Edit one or more videos. Move some images to a different drive or onto a PC or DVD, etc.	33 74 130 124 162
	You are using a low-speed SD card.	Use a fast SD card (10MB/sec. or better).	22
	The camera was struck or shaken during shooting.	Avoid striking or shaking the camera.	_
	The hard disk drive protection function was activated.	Avoid moving the camera suddenly during shooting. Set the HDD protection to [OFF].	143

Problem	Cause	Solution	Page
Photographed	The lens is dirty.	Clean the lens.	17
images are blurred.	The image is not focused.	Select the correct focus setting for the distance to the subject.	62
	The camera was moved during	Hold the camera correctly.	43
	shooting (still image).	Use a tripod to take the shot. Select the [SPORTS] scene	- 58
		setting. Set the ISO sensitivity to	50 84
		[ISO200]. Use the self-timer to take the	-
		shot.	75
	You shot a fast-moving subject (still image).	Select the [SPORTS] scene setting.	58
	(Sun maye).	Set the ISO sensitivity to [ISO200].	84
Photographed images are too dark.	Your finger was covering the flash when you took a picture with the flash (still image).	Hold the camera correctly.	43
	You used the flash to shoot a subject that was beyond the	Move closer to the subject to take the shot.	60
	effective range of the flash (still image).	Set the flash to [SUPPRESSED FLASH].	00
	The subject is in very bright	Set a positive (+) exposure bias	64
	surroundings.	setting. Set the backlight compensation	65
		to [ON]. Use the [SPOT] metering mode.	89
	There is insufficient light.	Use the [NIGHT SCENE] scene	58
		setting. Set the ISO sensitivity to [ISO200] (still image).	84
		[150200] (Suii Imaye).	
	A negative (–) exposure bias setting is set.	Set the correct exposure bias setting.	64
Photographed images are too bright.	You used the flash when too close to the subject (still image).	Move further away from the subject to take the shot. Set the flash to [SUPPRESSED FLASH].	60
	The subject is in very dark surroundings.	Set a negative (–) exposure bias setting.	64
	-	Use the [SPOT] metering mode.	89
	There is too much light.	Use the [SNOW&BEACH] scene setting.	58
	A positive (+) exposure bias setting is set.	Set the correct exposure bias setting.	64
	Backlight compensation is set.	Set the backlight compensation to [OFF].	65

Problem	Cause	Solution	Page
The quality of photographed images is	The shots were taken using a high-magnification digital zoom setting.	Set the digital zoom to $[4\times]$ or [OFF].	88
poor.	The shots were taken at a high sensitivity such as [ISO200] (still image).	Set the correct ISO sensitivity.	84
The color of photographed images is poor.	The white balance is incorrect.	Set the correct white balance. Use a [PRESET] white balance setting.	82
Continuous recording stops mid-way through.	There is no more available space on the recording destination drive.	Use another SD card. Change the destination drive. Erase some images. Edit one or more videos. Move some images to a different drive or onto a PC or DVD, etc.	33 74 130 124 162
	The self-timer is set.	When the self-timer is set, continuous recording is limited to 3 shots.	75
Playback			
l can't play back still images.	The folder name or file name was changed on a PC, etc.	Restore the original folder name or file names.	158
l can't play back videos.	The folder name or file name was changed on a PC, etc.	Restore the original folder name or file names.	158
	You are trying to play a video that was shot on a different camera.	Play videos that were shot on this camera.	-
l can't hear any sound.	The volume is set too low.	Raise the volume.	53
The thumbnail image suddenly changed.	You edited a video.	When you edit a video, the thumbnail image changes to the first frame of the remaining video.	124
An image was suddenly	You specified DPOF settings.	Images with DPOF settings are automatically protected.	119
protected.	You specified the image in a DVD creation list.	Images specified in a DVD creation list are automatically protected.	127
Rotated image	The image is protected.	Remove the protection.	114
display was not retained.	DPOF settings are specified for the image.	Clear the DPOF settings.	121
	The SD card is locked.	Unlock the SD card.	22
l can't protect an image.	The SD card is locked.	Unlock the SD card.	22

Cause	Solution	Page
DPOF settings are specified for the image.	Clear the DPOF settings.	121
The SD card is locked.	Unlock the SD card.	22
The total size of the images to be copied exceeds the amount	Reselect the images to be copied.	115
of available space on the drive.	the copy destination drive.	33
	drive.	116
	destination drive.	130
	destination drive.	124
	Move some of the images on the copy destination drive to another drive or to a PC or DVD, etc.	162
The SD card is locked.	Unlock the SD card.	22
The image is protected.	Remove the protection.	114
DPOF settings are specified for the image.	Clear the DPOF settings.	121
The SD card is locked.	Unlock the SD card.	22
The total size of the images to be moved exceeds the amount	Reselect the images to be moved.	117
of available space on the drive.	Change to another SD card as the destination drive.	33
	Change the destination drive. Erase some images on the	118 130
	Edit some videos on the	124
	Move some of the images on the destination drive to another drive or to a PC or DVD, etc.	162
The SD card is locked.	Unlock the SD card.	22
The specified destination for the move is on the same drive as the original location.	If you specify a destination that is on the same drive as the current location, "Selected file" is not displayed.	118
	DPOF settings are specified for the image. The SD card is locked. The total size of the images to be copied exceeds the amount of available space on the drive. The SD card is locked. The image is protected. DPOF settings are specified for the image. The SD card is locked. The total size of the images to be moved exceeds the amount of available space on the drive. The SD card is locked. The SD card is locked. The total size of the images to be moved exceeds the amount of available space on the drive.	DPOF settings are specified for the image.Clear the DPOF settings.The SD card is locked.Unlock the SD card.The total size of the images to be copied exceeds the amount of available space on the drive.Reselect the images to be copied.available space on the drive.Change to another SD card as the copy destination drive. Change the copy destination drive.Erase some images on the copy destination drive.Erase some images on the copy destination drive. Move some of the images on the copy destination drive to another drive or to a PC or DVD, etc.The SD card is locked.Unlock the SD card.The son card is locked.Unlock the SD card.The total size of the images to be moved exceeds the amount of available space on the drive.Reselect the images to be moved.The total size of the images to be moved exceeds the amount of available space on the drive.Unlock the SD card.The total size of the images to be moved exceeds the amount of available space on the drive.Reselect the images to be moved.The SD card is locked.Unlock the SD card as the destination drive. Change the destination drive. Change the destination drive. Erase some images on the destination drive. Erase some images on the destination drive. Edit some videos on the destination drive. Move some of the images on the destination drive.The SD card is locked.Unlock the SD card.The SD card is locked.Unlock the SD card.The specified destination for the drive or to a PC or DVD, etc.The SD card is locked.Unlock the SD card.The specified destinati

Problem	Cause	Solution	Page
I can't specify	There is no SD card inserted.	Insert an SD card.	33
DPOF settings.	There are no still images on the SD card.	Copy the images for which you want to specify DPOF settings onto the SD card.	115
	The SD card is locked.	Unlock the SD card.	22
I can't change the number of prints in the	You have already specified 99 prints of the same image.	The maximum number of prints you can specify for an image is 99.	120
DPOF settings.	You have exceeded the limit of 999 on the number of images for which DPOF settings can be specified.	The maximum number of images for which you can specify DPOF settings is 999.	120
	You have exceeded the maximum total number of prints of 9999.	The maximum total number of prints you can specify in the DPOF settings is 9999.	120
I can't clear the DPOF settings.	The SD card is locked.	Unlock the SD card.	22
I can't connect to the printer	The printer does not support PictBridge.	Check your printer.	-
using PictBridge.	You used the wrong procedure when connecting the USB cable.	Connect the cable using the correct procedure.	122
I can't change the number of prints in the PictBridge settings.	The total number of prints has already reached 99.	The maximum number of prints you can specify is 99.	123
l can't edit an video.	You selected a still image.	Select the video to be edited and then select an option from the menu.	124
	The video is protected.	Remove the protection.	114
	The SD card is locked.	Unlock the SD card.	22
I can't specify a DVD creation list.	There are no images on the hard disk drive.	Copy the images you want to record on a DVD onto the hard disk drive.	115
I can't select images for a DVD creation list.	The total size of the images exceeds the capacity of the selected disc.	Reselect the images so that they do not exceed the disc capacity. Use a disc with a larger capacity.	127
	You are attempting to set a video as a background.	You can only set still images as backgrounds.	127

Problem	Cause	Solution	Page
Erase, Setup		<u> </u>	
I can't erase	The image is protected.	Remove the protection.	114
an image.	DPOF settings are specified for the image.	Clear the DPOF settings.	121
	The SD card is locked.	Unlock the SD card.	22
l can't erase an album.	The album contains protected images.	Remove the protection.	114
	The album contains images with DPOF settings.	Clear the DPOF settings.	121
	You used "erase one image" or "erase selection" in the thumbnail display to erase all the images.	Erasing all the images in an album does not erase the album itself. To erase an album, use "erase selection" in the album display to select the album to be erased.	132
I can't erase the contents of an album using "erase selection".	There are no images in the album.	You cannot use "erase selection" to erase the contents of an album that contains no images.	130
Erasing images does not increase the available space on the hard disk drive.	There are no continuous blocks of space on the hard disk drive.	Move the images on the hard disk drive to a PC or DVD recorder with DVR and then format the hard disk drive.	145 162
I can't format an SD card.	The SD card is locked.	Unlock the SD card.	22

Problem	Cause	Solution	Page
Device conne	ction		
Nothing appears when I insert the CD-ROM.	_	Double-click "Setup.exe" on the CD-ROM.	159
I can't connect to a PC.	The AC adapter is not connected to the cradle.	Connect the AC adapter.	30
	The USB cable is not connected.	Connect the USB cable.	150
	The camera is not set in the cradle correctly.	Set the camera in the cradle correctly.	30
	Your operating system software is not supported.	The supported operating systems are Windows XP and 2000. Check your PC.	157
I can't copy files from the PC to the camera.	You are using a FULL SPEED MODE connection.	When a FULL SPEED MODE connection is used, the camera is protected. Check whether your PC supports a HIGH SPEED MODE connection.	151
	The SD card is locked.	Unlock the SD card.	22
	The total size of the files to be	Reselect the images to be	168
	copied exceeds amount of available space.	copied. Use a new SD card as the copy destination drive.	33
		Erase some images on the copy	130
		destination drive. Edit some videos on the copy destination drive.	124
		Move some of the images on the copy destination drive to another drive or to a PC or DVD, etc.	162
l can't create a	There is no DVD creation list.	Compile a DVD creation list.	127
DVD on the PC.	The DVD drive on the PC is incompatible.	Check the DVD drive on your PC.	_
No image is	The AV cable is not connected.	Connect the AV cable.	148
displayed when I connect the camera to a TV.	The camera is not set in the cradle correctly.	Set the camera in the cradle correctly.	30

Problem	Cause	Solution	Page
I can't connect the camera to	The AC adapter is not connected to the cradle.	Connect the AC adapter.	30
a DVD recorder with DVR.	The LAN cable is not connected.	Connect the LAN cable.	153
Uvn.	The LAN cable is incorrect.	When connecting the camera directly to a DVD recorder with DVR with a LAN cable, use a crossover-type LAN cable.	153
	The camera is not set in the cradle correctly.	Set the camera in the cradle correctly.	30
	The group name or password is incorrect.	Enter the correct group name and password.	173
	The IP CONFIG settings are incorrect.	Set the correct IP CONFIG settings.	173
	Your DVD recorder with DVR does not support "Net Dubbing".	You can only connect DVD recorders with DVR that support "Net Dubbing". Check your DVD recorder with DVR.	_
I can't copy images to the	There is no available space on the DVD recorder with DVR.	Delete some of the files on the DVD recorder with DVR.	-
DVD recorder with DVR.	There is no DVD inserted.	Insert a DVD.	-
WILLI DVN.	You inserted a read-only DVD.	Insert a recordable DVD.	_

Error Messages

The messages listed below indicating an error or status may be displayed on the screen.

Message	Explanation
NO CARD	There is no SD card inserted.
NO AVAILABLE MEMORY	There is no available space on the specified drive.
NO IMAGE	There are no images on the specified drive or album.
NO TARGET IMAGE.	There are no images required for the operation.
WRITE-PROTECTED CARD	You attempted to write data to a locked card.
PROTECTED IMAGE	You attempted to erase, move or edit a protected image.
FILE NUMBER IS FULL	The file numbers have reached "9999". When transferring images to the DVD recorder with DVR, you exceeded the limit on the number of files on the DVD recorder with DVR.
TOO MANY IMAGES	The number of images has reached 32,000.
VIDEOS CANNOT BE EDITED	You attempted to edit a videos shot on a different brand of camera.
DPOF ERROR	A DPOF-related error occurred.
LIST FILE ERROR	A DVD creation list error occurred.
CANNOT USE THIS CARD.	The card used is damaged or incompatible.
THIS CARD IS NOT FORMATTED.	The SD card used is not formatted or is formatted using NTFS.
GROUP NAME OR PASSWORD NOT INPUT.	A group name or password required for LAN connection has not been input.
CANNOT CONNECT TO NETWORK	The camera cannot connect to the network in LAN mode.
TARGET CONNECTION NOT FOUND.	There is no DVD recorder with DVR on the network.
CONNECTION CLEARED.	The connection was cancelled due to an error during LAN connection.
TRANSFER ERROR HAS OCCURRED.	An error occurred while data was being transferred to the DVD recorder with DVR.
NOT APPLICABLE FOR PictBridge.	The connected printer does not support PictBridge.
PRINTER ERROR	A printer error occurred during PictBridge connection.

Message	Explanation
NO INK	The printer is out of ink.
NO PAPER	The printer is out of paper.
PAPER ERROR	An error occurred with paper during printing.
AN ERROR OCCURRED. DISCONNECT USB CABLE.	An error occurred during USB connection.
STORING INTERRUPTED	The media stopped for a set time during recording and recording was interrupted.
HARD DISK DRIVE CANNOT BE ACCESSED	The camera detected that the camera had been dropped and stopped access to the hard disk drive.

Glossary

Backlight compensation

Exposure compensation to prevent a backlight phenomenon. Backlight refers to the effect of a subject becoming dark when a large amount of light enters the lens.

Chapter

A unit used for segments of recorded content. By inserting chapters in each scene, the user can quickly move to the beginning of a desired scene. In effect, a "Bookmarks" function.

Dolby Digital

An audio compression format that supports the multi-channel surround sound developed by Dolby Laboratories, Inc. in the U.S. Because this format allows audio to be compressed while minimizing the loss of sound quality, it allows the creation of DVD video with high-quality audio and videos. Generally referred to as "Dolby Digital 5.1" or "5.1 Surround".

DHCP

A mechanism wherein a router or similar device automatically assigns IP addresses and other identifiers.

DPOF (Digital Print Order Format)

A standard that allows information used for printing to be written directly onto SD cards. Files in this format allow prints to be obtained quickly and easily from a DPOFcompatible printer or commercial developing and printing service.

Exif (Exchangeable Image File format)

A full-color still-image file format for digital still cameras approved by the Japan Electronics and Information Technology Industries Association (JEITA). Exif is compatible with JPEG and TIFF and can be handled by most image processing software applications for PCs.

Exposure bias

A process of adjustment or correction that allows the photographer to deliberately make the photographed image darker or lighter than the exposure automatically determined by the camera.

Format

The process of configuring the content of hard disk drive or SD card so that it can be used to record data (also known as initializing).

• FULL SPEED MODE

A USB mode supported by the "USB2.0" and "USB1.1" standards. Uses a data transfer rate of 12Mb/sec.

HIGH SPEED MODE

A USB mode supported by the "USB2.0" standard. Uses a data transfer rate of 480Mb/ sec.

IP address

A number that identifies a computer connected in a network.

• JPEG

A file format used for compressing and saving color images. The compression ratio can be selected, but the higher the compression ratio, the poorer the quality of the expanded image. Widely used on the Internet and by painting applications for PCs.

LAN (Local Area Network)

A network that interconnects devices located within a limited area.

MPEG

A file format for compressing video files that allows files containing digital video and audio to be transferred efficiently.

NTSC (National Television System Committee)

The TV format used in Japan and the U.S.

PAL (Phase Alternation by Line)

The TV format used in most European countries, including Britain and Germany.

PictBridge

A communications standard for printing images via a direct printer connection. This allows devices to print by connecting directly to a PictBridge-compatible printer via a USB cable. In addition to allowing settings such as the number of prints to be specified on a digital camera, PictBridge can be used for a range of functions.

Red-eye effect

An effect in which the pupils of people's eyes appear bright red in shots taken in dark situations using a flash. The effect is caused by the light of the flash reflecting off the inside of the eye.

Router

A relay device that interconnects differing networks.

Smear

An effect that causes vertical strips of light to appear in pictures taken with cameras that use CCDs where the subject include a bright light source.

Subnet mask

A number that further specifies the IP address of a device connected to a router to enhance network performance.

White balance

A function that adjusts the color balance according to the color of the ambient light around the subject so that white subjects appear white in the photographed image.

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gigashot Series of Digital Camcorders - Depot Repair Warranty

Toshiba America Consumer Products, L.L.C. ("TACP") makes the following limited warranties to original consumers in the United States. THESE LIMITED WARRANTIES EXTEND TO THE ORIGINAL CONSUMER PURCHASER OR ANY PERSON RECEIVING THIS GIGASHOT DIGITAL CAMCORDER AS A GIFT FROM THE ORIGINAL CONSUMER PURCHASER AND TO NO OTHER PURCHASER OR TRANSFEREE.

GIGASHOT DIGITAL CAMCORDERS PURCHASED IN THE U.S.A. AND USED ANYWHERE OUTSIDE OF THE U.S.A., INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO ARE NOT COVERED BY THESE WARRANTIES.

GIGASHOT DIGITAL CAMCORDERS PURCHASED ANYWHERE OUTSIDE OF THE U.S.A. INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO, AND USED IN THE U.S.A. ARE NOT COVERED BY THESE WARRANTIES.

Limited One (1) Year Warranty on Parts and Labor

TACP warrants this gigashot Digital Camcorder and its parts against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. **DURING THIS PERIOD, TACP WILL**, **AT TACP'S OPTION, REPAIR OR REPLACE A DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU.**

Rental Units

The warranty for gigashot Digital Camcorder rental units begins on the date of the first rental or thirty (30) days after the date of shipment to the rental firm, whichever comes first.

Commercial Units

gigashot Digital Camcorders sold and used for commercial purposes have a limited warranty for all parts and labor, which warranty begins on the date of original retail purchase and ends on the date that is ninety (90) days thereafter.

Owner's Manual and Product Registration Card

Read this owner's manual thoroughly before operating this gigashot Digital Camcorder.

Complete and mail the enclosed product registration card or register your gigashot Digital Camcorder online at <u>www.tacp.toshiba.com/service</u> as soon as possible. By registering your gigashot Digital Camcorder you will enable TACP to bring you new products specifically designed to meet your needs and help us to contact you in the unlikely event a safety notification is required under the U.S. Consumer Product Safety Act. Failure to complete and return the product registration card does not diminish your warranty rights.

Your Responsibility

THE ABOVE WARRANTIES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

- (1) You must retain your bill of sale or provide other proof of purchase.
- (2) All warranty servicing of this gigashot Digital Camcorder must be made by the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.
- (3) The warranties from TACP are effective only if this gigashot Digital Camcorder is purchased and operated in the Continental U.S.A. or Puerto Rico.
- (4) Labor service charges for set installation, setup, adjustment of customer controls, and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.

(5) Warranties extend only to defects in materials or Workmanship as limited above, and do not extend to any gigashot Digital Camcorder or parts that have been lost or discarded by you or to damage to the gigashot Digital Camcorder or parts caused by fires, misuse, accident, Acts of God (such as lightning or fluctuations in electric power), improper installation, improper maintenance, or use in violation of instructions furnished by TACP; use or malfunction through simultaneous use of this gigashot Digital Camcorder and connected equipment; or to units that have been modified or had the serial number removed, altered, defaced, or rendered illegible.

How to Obtain Warranty Services

If, after following all of the operating instructions in this manual and reviewing the section entitled 'Troubleshooting,' you find that service is needed:

- (1) For instructions on how to obtain warranty service for your gigashot Digital Camcorder, contact TACP's Consumer Solution Center toll free at 1-800-631-3811.
- (2) You must include the original bill of sale (or a copy thereof) or other proof of purchase along with the entire gigashot Digital Camcorder to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center. You are responsible for all inbound transportation and insurance charges for the gigashot Digital Camcorder to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.

For additional information, visit TACP's website: www.tacp.toshiba.com

ALL WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THEU.S.A., INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE,

ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE. WITH THE EXCEPTION OF ANY WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THE U.S.A. AS HEREBY LIMITED, THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS, AND SIMILAR OBLIGATIONS OF TACP WITH RESPECT TO THE REPAIR OR REPLACEMENT OF ANY PARTS. IN NO EVENT SHALL TACP BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, BUSINESS INTERRUPTION, OR MODIFICATION OR ERASURE OF RECORDED DATA CAUSED BY USE, MISUSE OR INABILITY TO USE THIS GIGASHOT DIGITAL CAMCORDER).

No person, agent, distributor, dealer, or company is authorized to change, modify, or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of TACP arising under the warranty or under any statute or law of the United States or any state thereof is hereby limited to ninety (90) days from the date you discover, or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE IN THE U.S.A. SOME STATES OF THE U.S.A. DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, WHEN AN ACTION MAY BE BROUGHT, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE PROVISIONS MAY NOT APPLY TO YOU UNDER SUCH CIRCUMSTANCES.

For Toshiba Brand GSC-R30/60 SERIES HDD (HARD DISC DRIVE) CAMCORDERS

Toshiba of Canada Limited ("TCL") makes the following limited warranties to original consumers in Canada. THESE LIMITED WARRANTIES EXTEND TO THE ORIGINAL CONSUMER PURCHASER OR ANY PERSON RECEIVING THIS GSC-R30/60 SERIES HDD (Hard Disc Drive) CAMCORDER (the "CAMCORDER(S)" OR "Camcorder(s)") AS A GIFT FROM THE ORIGINAL CONSUMER PURCHASER AND TO NO OTHER PURCHASER OR TRANSFEREE.

CAMCORDERS PURCHASED IN CANADA, AND USED ANYWHERE OUTSIDE OF CANADA INCLUDING, WITHOUT LIMITATION, THE UNITED STATES AND MEXICO, ARE NOT COVERED BY THESE WARRANTIES.

CAMCORDERS PURCHASED ANYWHERE OUTSIDE OF CANADA, INCLUDING, WITHOUT LIMITATION, THE UNITED STATES AND MEXICO, AND USED IN CANADA, ARE NOT COVERED BY THESE WARRANTIES.

Limited One (1) Year Warranty on Parts and Labour

TCL warrants the Camcorder and its parts against material defects in materials or workmanship that result in the Camcorder failing for a period of one (1) year after the date of original retail purchase. **DURING THIS PERIOD, TCL WILL, AT TCL'S OPTION, REPAIR OR REPLACE A DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU FOR PARTS OR LABOUR. YOU MUST DELIVER THE ENTIRE CAMCORDER TO AN AUTHORIZED TCL SERVICE PROVIDER** ("ASP"). YOU MUST PAY FOR ALL TRANSPORTATION AND INSURANCE CHARGES FOR THE CAMCORDER TO AND FROM THE ASP.

Rental Units

The warranty for Camcorder rental units begins with the date of first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Limited Warranty for Commercial Units

TCL warrants Camcorders that are used for any commercial or business purposes as follows: all parts are warranted against material defects in materials or workmanship that result in the Camcorder failing for a period of ninety (90) days after the date of original retail purchase. DURING THIS PERIOD, TCL WILL, AT TCL'S OPTION, TO REPAIR OR REPLACE THE DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU FOR PARTS OR LABOUR. YOU MUST DELIVER THE CAMCORDER TO AN ASP. YOU MUST PAY FOR ALL TRANSPORTATION AND INSURANCE CHARGES FOR THE CAMCORDER TO AND FROM THE ASP.

Your Responsibility

THE ABOVE WARRANTIES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

- (1) You must provide your bill of sale or other proof of purchase.
- (2) All warranty servicing of this Camcorder must be performed by an ASP.
- (3) The warranties from TCL are effective only if the Camcorder is (i) purchased as new and unopened from TCL or from TCL's authorized distributors, dealers or resellers ("ADR's") and (ii) located/ operated in Canada.
- (4) Warranties extend only to material defects in materials or workmanship as limited above, and do not extend to:
 - a. Service, repairs or replacement made necessary by accident, misuse, abuse, moisture, liquids, dust, dirt, neglect, accident, damage, 24/7 applications, improper installation, improper operation, improper cleaning, improper maintenance, normal wear and tear, or any other external cause or event, act or omission outside the control of TCL, including fire, theft, acts of God, alteration.

- camcorder;
- b. Replacement of missing, discarded or lost parts, the provision of retrofits, or preventive maintenance;
- c. Repair of damage that is cosmetic only or does not affect the Camcorder functionality, such as wear and tear, scratches and dents;
- d. Software, software faults, or software replacement or fixes;
- e. Repair or replacement of batteries, covers, plastics, or appearance parts such as interior or exterior finishes or trim;
- f. Service on Toshiba-branded accessory items (such accessory items may be covered by their own warranty);
- g. Service on third party products or service made necessary by use of incompatible third party products;
- h. Service made necessary by the simultaneous use of this Camcorder and connected equipment;
- i. Modifications to the Camcorder not approved in writing by TCL, and service made necessary by the use or installation of non-Toshiba modifications to the Camcorder;
- j. Service of a Camcorder on which the TOSHIBA label or logo, rating label or serial number have been defaced or removed;
- k. On-site service and repair of the Camcorder; and
- 1. Damage to the Camcorder caused by failure to follow the specifications, User manuals or guides as to usage and/or storage.

Disclaimer and Limitation of Remedy

FO THE EXTENT NOT PRECLUDED BY LAW, ALL OTHER EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED. IF THE APPLICABLE LAW PRECLUDES THE EXCLUSION OF ANY IMPLIED WARRANTIES, THEN SUCH IMPLIED WARRANTIES ARE OTHERWISE LIMITED IN DURATION TO THE TERM OF THIS EXPRESS WRITTEN LIMITED WARRANTY. FO THE EXTENT NOT PRECLUDED BY LAW, THIS WRITTEN WARRANTY SUPERCEDES AND SPECIFICALLY DISCLAIMS ANY OTHER WARRANTY OR REPRESENTATION NOT STATED IN THIS WARRANTY, WHETHER MADE BY TCL, TOSHIBA CORPORATION, THEIR AFFILIATES, ADRs AND ASPs AND WHETHER MADE ORALLY OR IN WRITING (INCLUDING ANY ANY BROCHURE, STATEMENT IN PRESS RELEASE, ANNOUNCEMENT, ADVERTISEMENT, POINT OF SALE DISPLAY, ETC.).

YOU MUST READ AND FOLLOW ALL SET-UP AND USAGE INSTRUCTIONS IN THE APPLICABLE USER GUIDES AND/OR MANUALS. IF YOU FAIL TO DO SO, THIS CAMCORDER MAY NOT FUNCTION PROPERLY AND YOU MAY SUFFER DAMAGE. THIS WARRANTY WILL NOT COVER ANY SERVICE THAT IS REQUIRED, IN PART OR IN WHOLE, AS A RESULT OF ANY FAILURE TO FOLLOW THE SET-UP AND USAGE INSTRUCTIONS. THIS WARRANTY DOES NOT APPLY AND SHALL BE VOID AND UNENFORCEABLE IF THE CAMCORDER IS OPENED, SERVICED, OR REPAIRED BY PERSONS OTHER THAN THOSE AUTHORIZED BY TCL TO SERVICE OR REPAIR THE PRODUCT.

IF THE CAMCORDER FAILS TO WORK AS WARRANTED ABOVE, YOUR SOLE AND EXCLUSIVE REMEDY SHALL BE REPAIR OR REPLACEMENT OF THE DEFECTIVE PART. IN NO EVENT WILL <u>TCL. TOSHIBA CORPORATION, THEIR AFFILIATES, ADRS OR ASPS (THE "**RELATED PARTIES**") BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DAMAGES, MONEY, REIMBURSEMENT, <u>COSTS OR EXPENSES</u>. THIS LIMITATION APPLIES TO DAMAGES, MONEY, REIMBURSEMENT, COSTS OR EXPENSES OF ANY KIND WHATSOEVER INCLUDING ANY DIRECT OR INDIRECT DAMAGES, DAMAGE TO PROPERTY OR PERSON, LOST PROFITS, LOST SAVINGS, INCONVENIENCE OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER FOR BREACH OF WARRANTY, BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), UNDER A STATUTE OR UNDER ANY OTHER LAW OR FORM OR ACTION, OR WHETHER ARISING OUT OF THE USE OF OR INABILITY TO USE THE CAMCORDER, EVEN IF ANY OF THE RELATED PARTIES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR OF ANY CLAIM BY ANY OTHER PARTY.</u> warranties in any manner whatsoever.

Arbitration and Dispute Resolution

To the extent not precluded by law, any claim, dispute, controversy or disagreement (whether for breach of warranty, breach of contract, tort (including negligence), under a statute or under any other law or form of action) against any of the Related Parties arising out of, or otherwise relating to: (i) this warranty; (ii) the Camcorder; (iii) any oral or written representations, statements, brochures, press releases, advertising announcement, point of sale display, or promotional material relating to the Camcorder; (iv) the relationships that result from this warranty, (the foregoing claims, disputes controversies and disagreements are collectively referred to as the "Dispute"), shall be referred to and resolved by final and binding arbitration (to the exclusion of the courts). To the extent not precluded by law, you agree to waive any right that you may have to commence or participate in any representative or class proceeding against the Related Parties relating to any Dispute. If and where applicable and to the extent not precluded by law, you further agree to opt out of any such representative or class proceedings. Arbitration of any Dispute will be conducted in the forum and in the manner as agreed to between you and TCL. Failing such agreement, the arbitration will be conducted by one arbitrator pursuant to the laws and rules relating to arbitration generally in force in the jurisdiction in which you reside at the time that the Dispute arises. To the extent not precluded by law, no claim, dispute, controversy or disagreement of any other person may be joined or combined with any Dispute by you, without the prior written consent of TCL.

Critical Applications

The Product you have purchased is not designed for any "critical applications." "Critical applications" means life support systems, medical applications, connections to implanted medical devices, commercial transportation, nuclear facilities or systems or any other applications where Product failure could lead to injury to persons or loss of life or catastrophic property damage.

General Provisions

If and to the extent that any provision of this limited warranty should generally be found to be unenforceable, the unenforceable provision shall be severed from the warranty and deemed not to form part of the warranty. The remaining provisions of this warranty shall be and remain valid and enforceable. If and to the extent that any provision of this limited warranty as it relates to any of the Related Parties is found to be invalid or unenforceable in respect of that party (the "Excluded Party"), the Excluded Party shall be deemed to be severed or excluded from the provision, and the provision shall remain valid, enforceable and applicable in respect of the other or remaining Related Parties.

To the extent permitted by law, this limited warranty shall be governed and construed in accordance with the laws of Ontario.

If there is any inconsistency between this limited warranty, on the one hand, and any statement in the packaging of the Camcorder or in any other document enclosed with, or used in the context of the promotion or sale of, the Camcorder, on the other hand, the provisions of this limited warranty shall prevail.

How to Obtain Warranty Services

If, after following all of the operating instructions in this manual and checking the "Troubleshooting" section, you find that service is needed:

- To find the nearest TCL Authorized Service Provider, visit TCL's web site at www.toshiba.ca, or call toll free 1-800-268-3404
- (2) Present your bill of sale or other proof of purchase to the Authorized Service Provider.

For additional information, visit TCL's website: www.toshiba.ca

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SC-R60/GSC-R30

ÁMERA CON DISCO DURO Toshiba auía Rápida de Inicio sc-R60/GSC-R30

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Before Using Your Camera Reading the Owner's Manual on your PC **Component Names Inserting and Removing the Battery** Charging Turning the Camera On and Off Setting the Date and Time Creating Albums Shooting Video Taking Still Images Playback

This is a camera equipped with 1.8-inch 60GB or 30GB hard disk drive and a 10× zoo lens. It will shoot 2-megapixel still images as well as MPEG-2 format videos.

To ensure correct use of your hard disk camera, be sure to thoroughly read this Owner Manual before you start using the camera.

Always keep this Owner's Manual close by after you have finished reading it.

The design, specifications, software and content of this Owner's Manual are subject to change without notice in the interest of product improvement.

The illustrations and screen displays in this manual are exaggerated and simplified fo ease of viewing, so there can be slight differences between them and the actual produ

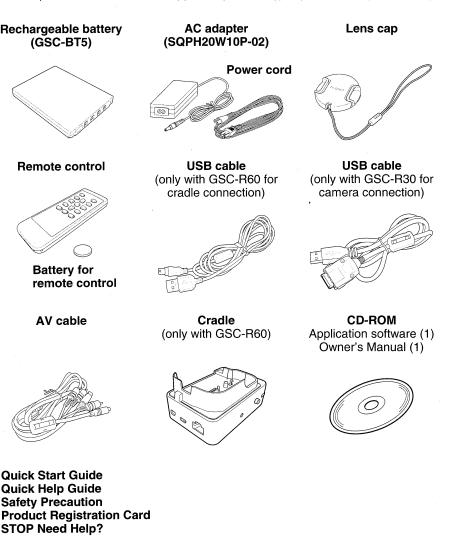
Trademark Information

- gigashot is a trademark of Toshiba Corporation.
- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Windows is an abbreviated term referring to the Microsoft Windows Operating System.
- Other company or product names are trademarks or registered trademarks of the respective companies.

Software and Owner's Manual

- Neither the entirety nor a portion of the accompanying Software or Owner's Manual ca be transferred or reproduced without permission.
- The accompanying Software and Owner's Manual can be used with a single apparatu
- Please note that we cannot be held liable for damages incurred by you or a third par as a result of using an apparatus with this Software and Owner's Manual.
- Computer screens in the Owner's Manual are given as an example. These may differ from your actual screen. We cannot be held liable for compensation for errors in description.
- In this manual, the recording, while the icon indicates functions and settings that apply to video recording, while the icon is used to indicate functions and settings that apply to s image photography. Both still images and videos are referred to as "images".

matched, please contact the Toshiba Customer Service Department [(800) 319-6684] U.S.A.) or Toshiba Customer Support Department [(800) 268-3404] (for Canada).



Adobe Reader software used to view the Owner's Manual.

"Adobe Reader" must be installed on your PC before you can read the Owner's Manua

Recommended PC System*1

- OS*2 : Windows® 2000 Professional Windows XP Home Edition or Windows XP Professional
- RAM : 128MB or better
- Hard disk drive capacity
 - : 90MB or better available
- Other : Microsoft Internet Explorer 5.5 or later
 - *1: The recommended system requirements shown above are only for reading the Owner's Manual on a PC. When installing the software applications bundled with this product, refer to the respective system requirements given in the Owner's Manual.
 - *2: In each case, only PCs with pre-installed operating systems are supported. Operation is not guaranteed on upgraded PCs. Macintosh computers are not supported.

Installing Adobe Reader

- **1** Insert the bundled CD-ROM into the CD-ROM drive on your PC.
- 2
- Click the [ENGLISH] icon.

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Click the [Adobe® PDF] icon.

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Setup begins. Install the software as directed by the on-screen instructions. ovided on the bundled CD-ROM.

Insert the bundled CD-ROM into the CD-ROM drive on your PC.

Click the [ENGLISH] icon.

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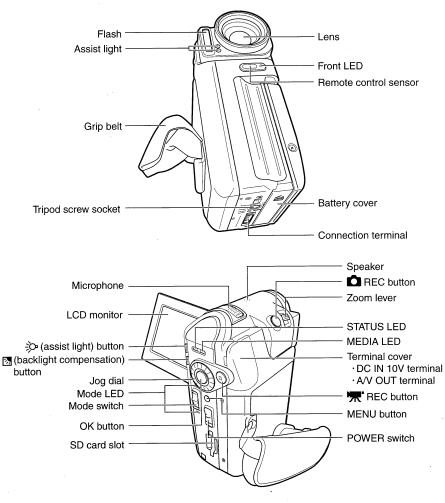
Click the [gigashot Manual] icon.

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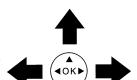
Adobe Reader starts up and displays the Owner's Manual.

For more information on using Adobe Reader, refer to the Adobe Reader Help menu.





Using the OK Button



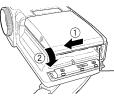
Pressing directly down on the OK button confirms the selected item, but you can also move it up \blacktriangle , down \triangledown , le \blacktriangleleft and right \triangleright .

Use the OK button in recording mode to adjust the focus, select the scene, set the flash and exposure bias, and to adjust items from manual

Check that the camera is turned on.

nserting the Battery

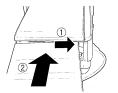
Open the battery cover.



Slide the battery cover lock on the bottom of the camera in the direction of the arrow (1) and open the battery cover in the direction of the arrow (2).

Battery lock lever

Use the battery to push the battery lock lever in the direction of the arrow (1) as you slide the battery in (2).



Insert the battery as shown in the figure with the label facing up. Insert the battery firmly as far as it will go, and check that the battery is secured by the battery lock lever.



Close the battery cover.



Slide the battery cover in the direction of the arrow to close it.

Check that the battery cover is securely closed.

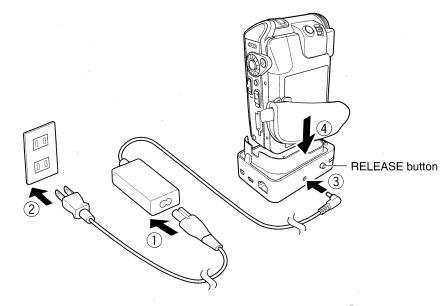


IMPORTANT

. If you load the battery when the camera has not been correctly shut down, the camera may not operate correctly. In this event, turn the camera off and on again. is low. Charging the battery fully takes around 2.5 hours. Time needed for recharging increases or decreases depending on factors including the surrounding temperature.

Check that the battery is loaded in the camera and that the camera is turned off.

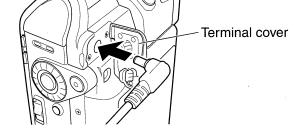
Charging with the Camera in the Cradle



Connect the components in the sequence 1 **to** 4 **abov**. When battery charging begins, the CHARGE LED on the cradle lights orange ar the STATUS LED on the camera lights red.

When charging is completed, the CHARGE LED on the cradle turns off and the STATUS LED on the camera turns green. Press the RELEASE button on the crad and remove the camera.

If there is a fault during charging, the STATUS LED flashes red.



Open the terminal cover on the camera.

Connect the power cord and AC adapter and then plug the power cord into the mains power socket.

Plug the DC plug on the AC adapter into the DC IN 10V socket on the camera.

When battery charging begins, the STATUS LED on the camera lights red. When charging is completed, the STATUS LED on the camera turns green.

9

IMPORTANT

- The battery is charged while in the camera. Never attempt to charge the battery with another charger.
- If a problem arises during charging, unplug the power cord from the mains power outlet, remove the battery from the camera and contact Toshiba Customer Service Department or Toshiba Customer Support Department. Be careful when removing the battery as it can become hot.
- If the camera is charged in conditions where it becomes hot (in direct sunlight, etc.), the heat in the camera may trigger a sensor in the camera that prevents charging from beginning immediately. If this occurs, allow the camera to cool fully before charging.

MEMO

• To get the best possible performance from your battery, charge it when the ambient temperature is between 50°F (10°C) and 86°F (30°C).

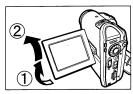
Battery Level Display

When you turn the camera on, the level of charge in the battery appears on the LCD monitor.

Display			Ðz
		Almont out of	Dunning on the



Turning the Camera On and Off by Opening and Closing the LCD Monitor



Opening the LCD monitor turns the camera on and closir the LCD monitor turns the camera off.

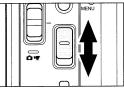
The first time you use the camera, or when the battery has been left out of the camera for a long period, the screen f setting the date and time appears. Set the date and time.



МЕМО

- If [LCD-LINKED POWER] is set to [OFF], opening and closing the LCD monito does not turn the camera on and off. Slide the POWER switch to turn the came on and off.
- Use the mode LED to check whether the camera is turned on when the LCD monitor is closed.

Turning the Camera On and Off by Sliding the POWER Switch



Sliding the POWER switch turns the camera on and off.

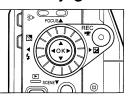


МЕМО

- If the camera is not used for a set period of time, it automatically turns off to avo wasting battery power. This is called the Auto power off.
- If you load the battery or connect the AC adapter without correctly shutting dow the camera first, the camera may not operate correctly. If this occurs, turn the camera off and on again.
- To forcibly turn off the camera when there is a problem such as a system error slide the POWER switch across and hold it in place for at least 5 seconds. Not that this may result in the loss of any files that are being created. Settings such a the date and time may also revert to their default values. In this event, reset the settings before using the camera again.

ong period, the screen for setting the date and time automatically appears. Use this reen to set the date and time. Note that you cannot set seconds.

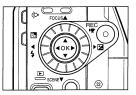
Move the OK button to \blacktriangleleft or \blacktriangleright to select a setting and then



use the jog dial to select a value.

DATE AND TIME SETTING DATE +2005+01.01 TIME 00:00 FORMAT YYYY.MM.DD OK CANCEL CHANGE + SELECT After selecting the desired setting, you can also move the OK button to \blacktriangle or \blacktriangledown to set the value.

Move the OK button to ◀ or ► to select [OK] and then press the OK button.





This sets the date and time. The first time you use the camera, the display switches to the create album screen. Use this screen to create your albums.

If you have already created albums, the camera switches to recording mode. To cancel out of date and time setting, select [CANCEL] and press the OK button.

MEMO

- The order in which the date appears depends on the selected format. The available formats are [MM/DD/YYYY], [YYYY.MM.DD] and [DD/MM/YYYY].
- When you finish setting the date and time after selecting [DATE AND TIME SETTING] in the setup menu, the setup menu reappears.

after you format the hard disk drive, etc.), the create album screen is automatically displayed.



Use the jog dial to select an album type.





Press the OK button.

An album is created and the camera switches to recording mode.



MEMO

• You cannot select album types on an SD card.

Album Types*

The available album types are shown below.

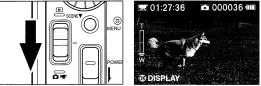
Icon	Name	Icon	Name	lcon	Name	lcon	Name
200 F	ART	\square	MAIL	Ô	GIFT		TRASH
a	DRIVE	X	PARTY	Ŋ	TRAVEL	Ĵ	MÚSIC
?	SPORTS	Â	BEACH	HP.	LANDSCAPE	T_{i}	BUSINES
N.	MEMO		PC		BIRTHDAY	9	WEDDIN
	CEREMONY	3	BABY	R	KIDS	3	FAMILY
	FAMILY2	R	FAMILY3		PET	a a	SPRING
	SUMMER	*	AUTUMN	SUS SUS	WINTER		HAPPY
3	SAD		LOVE	Ø	LUCKY	<pre>Second Second Seco</pre>	PARK

t Teshiha recorded the right to odd or delete album types without prior potice

Check that the battery is loaded in the camera and that you have removed the lens cap. Then open the LCD monitor to turn the camera on.

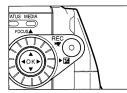
Use the grip belt to avoid dropping the camera.

Slide the mode switch in the direction of the arrow to select recording mode.



The 🔭 icon appears in the top-left corner of the screen during video recording. If the LCD monitor is too bright or too dark, adjust the monitor brightness.

Press the 🐙 REC button.



The camera starts shooting the video. Press the \ REC button again to end video recording. The front LED lights during video recording. To pause while you are shooting a video, set REC PAUSE to On.

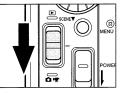


IMPORTANT

- Do not disconnect the AC adaptor, open or close the battery cover, or remove the battery or SD card while the camera is in operation. Doing so may damage the camera, hard disk drive and/or SD card, and may corrupt the data stored on the hard disk drive or SD card.
- Avoid low temperature-burns when using the camera for long periods of time. The camera can get hot, especially when used in hot environments. For long periods of shooting, the use of a tripod is recommended.
- When you are shooting very bright or shiny subjects, vertical bands may appear on the image. This is a phenomenon called "smear" and is not a problem with the camera.

aperture size) to suit the photography conditions.

1 Slide the mode switch in the direction of the arrow to select recording mode.



Looking at the LCD monitor, compose the shot.

image.

If the LCD monitor is too bright or too dark, adjust the monitor brightness.

Press the **C** REC button down halfway (1) and then pres it down fully (2).



Pressing the button down halfway automatically sets the focus and exposure. The ISO sensitivity, shutter spee and aperture are displayed at that point. Continue to press the button down fully to take the picture. Note that camera movement when you press the shutt button down fully will cause blurring in the photographe

After shooting, the front LED lights.

When the still image size is set to [2M], pressing the AREC button down halfwawidens the area that can be photographed and the screen display changes accordingly. When this occurs, the center of the image may shift. If you release the REC button or press the button down fully to take the picture and then do no use the camera controls for around 3 seconds, the screen display reverts to its original area.



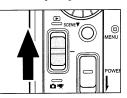
МЕМО

- In the interval between the REC button being pressed down halfway and the focus being set, the LCD monitor image may turn dark.
- Flash charging may take a few seconds. During flash charging, the STATUS LE flashes orange and you cannot take the picture.
- When the subject is dark, you can fire the assist light for focusing by pressing to REC button down halfway.
- The assist light can be kept normally on by pressing the assist light button.

Open the LCD monitor to turn the camera on.

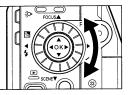
laying back Still Images

Slide the mode switch in the direction of the arrow to select playback mode.



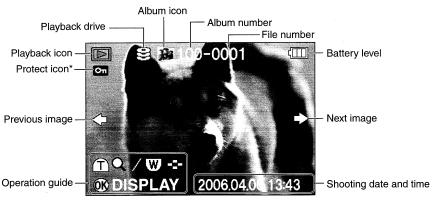
The last image shot appears on the LCD monitor. If the LCD monitor is too bright or too dark, adjust the monitor brightness.

Use the jog dial to select the still image you want to play back.



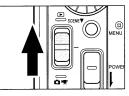
A grainy image appears initially, followed by the normal image.

Still images shot with the camera rotated are initially played back rotated.



isplayed for protected images.

select playback mode.



The last image shot appears on the LCD monitor. If the LCD monitor is too bright or too dark, adjust the monitor brightness.

Use the jog dial to select the video you want to play.



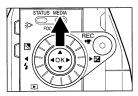
A grainy image appears initially, followed by the norm image.

The video icon is displayed in the video, with film icons a being shown at the top and bottom of the LCD monitor.

Video icon



Move the OK button to

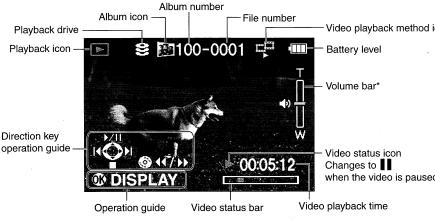


The selected video is played.

To stop video playback, move the OK button to $\mathbf{\nabla}$. To pause the video, move the OK button to $\mathbf{\Delta}$. To adjust the speaker volume, use the zoom lever.

T : Increases the volume.

W : Decreases the volume.



* Displayed when the volume is changed.

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TOSHIBA

R60-QS

GX1C000BG110/PX1C000BG

• gigashot oshiba HARD DISK CAMERA afety Precaution SC-R60/GSC-R30

AMÉRA À DISQUE DUR Toshiba onsignes de sécurité SC-R60/GSC-R30

ÁMERA CON DISCO DURO Toshiba recauciones de Seguridad

ENGLISH

- Read these salety precautions carefully before using this product.
- These precautions provide valuable safety instructions that you must observe.
- The indications used for the precautions have the following meanings:

Graphic symbol definitions

Graphic Symbol	Meaning				
\bigcirc	Indicates a prohibited action that must not be carried out. The actual prohibited action is indicated in the symbol or nearby graphically, or described in text.				
	Indicates a necessary action that must be carried out. The actual necessary action is indicated in the symbol or nearby graphically, or described in text.				

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WARNING ould you ever notice a

ange odor, smoke, or essive heat coming from camera, remove the battery AC adapter.

ntinued use in this state might ise fire, electric shock, or ns. Take care not to burn irself if the battery gets hot. details on repair, consult the shiba Customer Service partment or Toshiba Customer oport Department.

preign objects or water have ered the camera, turn the wer OFF and remove the tery and AC adapter.

ntinued use in this state might use fire or electric shock. nsult the Toshiba Customer rvice Department or Toshiba stomer Support Department.

he camera has fallen or its se has been damaged, turn power OFF and remove the tery and AC adapter.

ntinued use in this state might use fire or electric shock. Iniurv y occur from handling the naged case.

nsult the Toshiba Customer rvice Department or Toshiba stomer Support Department.

not allow metallic objects or mmable foreign matter ide the camera.

s might cause fire or electric ock.

not insert or drop foreign ects in the battery/SD card t, terminals, or other holes or enings.



Do not use the camera in areas near water.

This might cause fire or electric shock.

Take special care during rain, snow, on the beach, or near the shore.

Do not use the camera in the bath or shower.

This might cause fire or electric shock

Do not disassemble, modify, or repair the camera.



This might cause fire or electric shock.

For repair or internal inspection, ask the Toshiba Customer Service Department or Toshiba Customer Support Department.

Do not touch power cables, TV cables, or LAN/USB cables during a thunderstorm.



This might cause electric shock.

Do not use the camera while walking, driving, or riding a motorcycle.

This might cause you to fall over or result in a traffic accident.





the camera where its use is restricted, such as in an airplane or hospital.



This might affect flight or medical equipment resulting in accident. Use during airplane take-off/ landing is prohibited by law. For use in a hospital, consult hospital staff.

Do not use the camera in humid, steamy, smoky, or dusty places.



This might cause fire or electric shock.

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.



This might adversely affect the case or the internal parts, resulting in fire.

Do not play the supplied CD-ROM with a music CD player or a similar device.



This might damage the headphone or speaker, and/or may damage your ears.

Do not drop or subject the camera to strong impact.

This might cause fire, electric shock, or malfunction.

Before moving the camera, disconnect the cables.

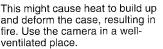


Neglecting this might damage the cables, resulting in fire or electric shock.

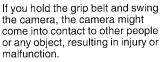
inclined or unstable surfaces.

This might cause the camera to fall or tilt over, causing injury or malfunction.

Do not wrap or place the camera in cloth or blankets.



Do not swing the camera while walking.



Before cleaning the camera, remove the battery and AC adapter.



Neglecting this might cause electric shock.

Do not fire the flash near the eyes.

This might cause temporary damage to the eyesight.

Do not subject the LCD monitor to impact.

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water. If the internal fluid has entered your eyes, consult a physician to receive treatment.





/!\WARNING

e the AC adapter only with indicated power supply tage.

e with any other power supply age might cause fire or ctric shock.

not disassemble, modify, or air the AC adapter.

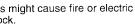
s might cause fire or electric ock.

casionally remove the plug m the outlet and clean the ongs and the surface where prongs are connected if st or dirt has adhered.



oss of plug insulation might use fire.

not bring metal into contact h the connection points of AC adapter when its plug is an outlet.



Do not place blankets over the AC adapter connected with the power source or place the adapter near a heater or on an electric (warm) carpet.



This might cause fire or malfunction.

Observe the following when handling the AC adapter cord.

- Do not damage, modify (e.g., to extend), or heat the AC adapter cable.
- Do not pull the AC adapter cable, place something heavy on it, or pinch it.
- Do not bend, twist, or bundle the AC adapter cable with an excessive force.

These might cause fire or electric shock.



the AC adapter plug with a wet hand.



This might cause electric shock.

Do not remove the AC adapter plug from a wall outlet by pulling the actual cable.



This might damage the cable or plug, resulting in fire or electric shock. Make sure to hold the plug when removing it.

Use only the specified AC adapter (SQPH20W10P-02) and power cable.



Use of an AC adapter other than specified might cause fire or malfunction.

About the battery

camera for a long period of time, remove the AC adapter plug from a wall outlet for safety.



Malfunction of the camera, if it happens, might result in fire.

Do not use the AC adapter for any use other than with this camera.

This might cause fire or malfunction.

Firmly insert the AC adapter plug into a wall outlet.

Neglecting this might cause fire or electric shock.





Observe the following when handling the battery

- Do not disassemble/modify
- Do not heat
- · Do not throw in fire or water
- · Do not hammer, step on, drop, or subject to strong impact
- · Do not use in applications other than specified
- · Do not recharge in any manner other than specified
- Do not connect the battery electrodes (+ and terminals) with wire or other metallic objects
- · Do not carry or store together with metallic necklaces or pins

This might cause the battery to rupture, ignite or heat up, resulting in fire or serious injury.



SC-BT5).

e of a battery other than ecified might cause fire, mage, or malfunction.

o not leave battery within the ach of small children.

vallowing the battery or the note controller's coin-sized hium battery might cause isoning. If you accidentally allow the battery, contact a ctor immediately.



and comes into contact your eyes, immediately wash your eyes with clean, running water, and ask a physician for treatment.

Leaving your eyes in this condition might cause eye damage.

o not remove the battery mediately after the camera s been used for a long time.

e battery becomes hot during e.

uching a hot battery might use burns.

not insert unusable battery discharged battery.

herwise, the battery may oture, ignite or heat up, sulting in fire, burns, or injury.



Before storing the battery, attach insulating tape to both the plus (+) and (-) electrodes.

Storing battery as it is might cause the battery to leak fluid, heat up or rupture, resulting in burns or injury.

Insert the battery carefully making sure that its polarities (marked by + and –) are facing the correct way.

Inserting the battery with its polarities facing the wrong way might cause fire or injury, or damage to the surrounding area due to the battery rupturing or leaking.





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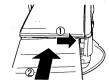
TOSHIBA



How to insert battery

1. Before inserting the battery

Face the label side of the battery upward and the terminal side of it inside of the battery chamber. And insert the battery in the direction of arrow (2) while pushing the battery lock knob with the battery in the direction of arrow (D).



2. Before closing the battery chamber cover

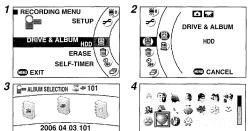
Check the battery inserted closely into place and fixed with the lock knob, and close the battery chamber cover.

Toshiba HARD DISK CAMERA GSC-R60/GSC-R30

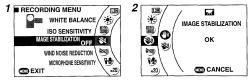
Quick Help Guide (Photography)



- 1 Press ♀ to display the recording menu and then use ○ to select [DRIVE & ALBUM]. Then press .
- $m{2}$ Use \odot to select [HDD] and press \circledast .
- 3 Move ⊕ to ▼ to select [CREATE NEW] and press ⊕.
- 4 Use to select an album type and press ...



and then use () to select [IMAGE STABILIZATION]. Then press (). 2 Use () to select [ON] and press ().



menu and then use ⊜ to select [SPORTS]. Then press ⊛.

* Selecting [SPORTS] sets the flash mode to [SUPPRESSED FLASH].



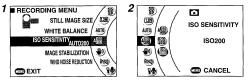
Use the Flash

- 1 Move ⊕ to ◀ to display the flash menu and then use ○ to select [FORCED FLASH]. Then press ⊕.
- The flash cannot be used with some scene settings.



2 Use () to select [ISO200] and press .

* Raising the sensitivity also increases noise in images.



the current exposure bias value. While looking at your image, use ⊕ to modify the exposure bias and then press ⊕.

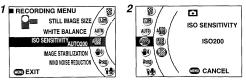


Use Backlight Compensation **1** Press the **3** button.



$m{2}$ Use \bigcirc to select [ISO200] and press $\textcircled{\otimes}$.

* Raising the sensitivity also increases noise in images.



 * Selecting [NIGHT SCENE] sets the flash mode to [SUPPRESSED FLASH] or [FORCED FLASH].



Use the Flash (Still Images)

- 1 Move ⊕ to ◀ to display the flash menu and then use ⊕ to select [FORCED FLASH]. Then press ⊕.
- * The flash cannot be used with some scene settings.

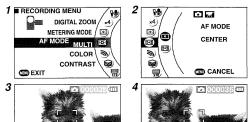


menu and then use () to select
[MANUAL FOCUS]. Then press ⊕.
2 While looking at the image on the LCD monitor, use () to focus the shot.





- **2** Use \bigcirc to select [CENTER] and press \bigcirc . **3** Press \bigcirc to return to the recording
 - menu and move the camera so that your subject is in the center of the shot. Then press one down halfway to set the focus.
- 4 Holding \bigcap_{c} down halfway, recompose the shot as desired and then press \bigcap_{c} down fully to take the shot.



SELE-TIMER CONTINUOUS SHOOTING VIDEO QUALITY STILL IMAGE SIZE WHITE BALANCE ISO SENSITIVITY IMAGE STABILIZATION WIND NOISE REDUCTION MICROPHONE SENSITIVITY DIGITAL ZOOM METERING MODE AF MODE COLOB CONTRAST SHARPNESS PREVIEW BEC PAUSE LCD BRIGHTNESS SETUP

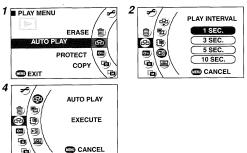
Toshiba HARD DISK CAMERA GSC-R60/GSC-R30

Quick Help Guide (Playback • Other)

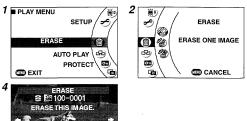


then use ()) to select [AUTO PLAY]. Then press ⊕.

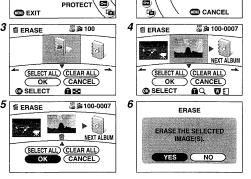
- ${m 2}$ Use ${}_{\bigcirc}$ to select a setting and press ${}_{\oplus}$.
- 3 Use ⊕ to select the desired setting and press ⊕.



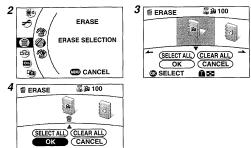
- 1 Press ♀ to display the play menu and then use to select [ERASE]. Then press ⊕.
- 2 Use ⊜ to select [ERASE ONE IMAGE] and press ⊕.
- $\boldsymbol{3}$ Use \bigcirc to select the image to be erased.
- 4 Move ⊕ to ▲ to select [YES] and press ⊕.



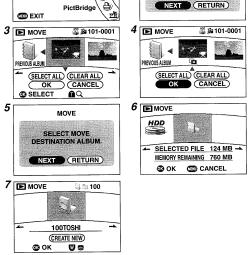
- 2 Use to select [ERASE SELECTION] and press .
- 3 Use ⊕ to select an album and slide ≡ towards T to display the images in the album.
- 4 Use ⁽) to select the image to be deleted and press ⊕.
- **5** Move to \blacksquare to select [OK] and press
- *6* Use \bigcirc to select [YES] and press \oplus .



- 2 Use () to select [ERASE SELECTION] and press ⊕.
- 3 Use ⊕ to select the album to be deleted and press ⊕.
- 4 Move ⊕ to ▼ to select [OK] and press ⊕.
- **5** Use \bigcirc to select [YES] and press \oplus .

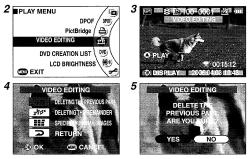


- **2** Use \bigcirc to select [NEXT] and press $\textcircled{\otimes}$.
- 3 Use ⁽) to select the image to be moved and press ⊕.
- 4 Move ⊕ to ▼ to select [OK] and press ⊕.
- **5** Use \bigcirc to select [NEXT] and press \oplus .
- 6 Use ⁽) to select the drive to which the image is to be moved and press ⊕.
- 7 Use () to select the album to which the image is to be moved and press .



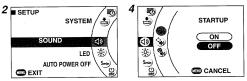
Then press .

- 3 Move ⊕ to ▲ to play the video, select the editing point and press ⊕.
- 4 Use ⊕ to select the editing details and press ⊕.
- $m{5}$ Use () to select [YES] and press \oplus .



the audio volume.

- T : Increases the volume.
- W : Decreases the volume.
- Mute the Camera Sounds
- Press Q to display the menu and then use ⊕ to select [SETUP]. Then press ⊕.
- 3 Use ⊕ to select the desired setting and press ⊕.
- 4 Use \bigcirc to select [OFF] and press $\textcircled{\baselinetwidtharpineton}$.



PROTECT COPY MOVE DPOF PictBridge VIDEO EDITING DVD CREATION LIST LCD BRIGHTNESS SETUP Setup Menu SOUND LED AUTO POWER OFF LCD-LINKED POWER LAN SETTINGS VIDEO OUTPUT LANGUAGE DATE AND TIME SETTING SYSTEM

For U.S. Residents



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Mon. - Fri. 10:00 a.m. to 7:00 p.m. ET

Many questions regarding parts, service and warranties can be answered by visiting the Customer Solutions section of our website: www.toshiba.com/tacp

THANK YOU

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IMPORTANT!

Product Registration Card

See Other Side

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CONFIRMATION OF OWNERSHIP: We will keep the model number, serial number, and other information on this card in our files for up to ten years. In the event of fire, flood or theft, your registration will serve as your proof of purchase for insurance purposes.

WARRANTY SERVICE: Filling out this card will help us contact you in case there is a IMPORTANT: Please register your product within 10 days	a problem with this product. by mail or register online @ www.tacp.toshiba.com/register
Mr. Mrs. Ms. Miss Email as	ddress
First Name, Initial Last Nam	
	Apt. No.
Street	
City	State Zip Code
Home telephone number Work telephone num	
	Purchase
Area Code Area Code	Month Day Year
	n, write the complete model number of the product you purchased in the space belo erial Number
Price paid (excluding tax) \$	
Have you purchased a service contract or extended warranty for this product?	7. Where was this product purchased?
Yes, from my retail dealer	01. Received as a Gift 07. Catalog Showroom
 No, but contract was offered by my retail dealer 	02. Department Store 08. Rental Dealer
3. No, contract was not offered	03. Discount Store 09. Mail Order varranty last? 04. TV/Appliance Store 10. Premium Offer
. If you answered "yes" to 6, how long does your service contract or extended w 1. 1 Year 3. 3 Years	05. Specialty/Electronics Store 11. Other
1. 1 Year 3. 3 Years 2. 2 Years 4. More than 3 Years	06. 🔲 Warehouse/Membership Club
Would you like to obtain more information from Toshiba on extended warranties	is:
1. Yes 2. No	
	fold he
With #1 being the most important princitize the following:	Chack all that apply
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	Check all that apply 5. Which of the following products do you own?
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own?
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own?
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer TV - projection TV TV - tabletop TV - combination TV - flat panel/plasma
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own?
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV - tabletop TV - flat panel/plasma DVD player Home Theater in a Box TiVo®
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV Combination TV - flat panel/plasma DVD player Home Theater in a Box TTV [®] Home Networking Server
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer TV - projection TV TV - tabletop TV Combination TV - flat panel/plasma DVD player Home Theater in a Box TiVo® Home Networking Server Computer Digital Camera
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV - tabletop TV - flat panel/plasma DVD player Home Theater in a Box TIVo® Home Networking Server Computer Digital Camera Digital Camera
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer TV - projection TV TV - tabletop TV Combination TV - flat panel/plasma DVD player Home Theater in a Box TTV0 [®] Home Networking Server Computer Digital Camera Digital Camera Digital Camera Speakers - stand alone
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer TV - projection TV TV - tabletop TV Combination TV - flat panel/plasma OVD player Home Theater in a Box TiVo® Home Networking Server Computer Digital Camera Digital Camcorder Recelver
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product Manufacturer TV - projection TV TV - tabletop TV Combination TV - flat panel/plasma DVD player Home Theater in a Box TTV0 [®] Home Networking Server Computer Digital Camera Digital Camera Digital Camera Speakers - stand alone
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV - flat panel/plasma DVD player Home Theater in a Box TiVo® Home Networking Server Computer Digital Camera Di
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV - flat panel/plasma DVD player Home Theater in a Box TiVo® Home Networking Server Computer Digital Camcorder Receiver Speakers - stand alone Other 6. May we contact you?
With #1 being the most important, prioritize the following: 1. Where do you get new product information?	5. Which of the following products do you own? Product TV - projection TV TV - tabletop TV Combination TV Combination TV - flat panel/plasma DVD player Home Theater in a Box TV0 [®] Home Networking Server Digital Camera Dital Camera Digital Camera Digital Camera Digital Camera Digital Cam
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Limited United States Warranty gigashot Series of Digital Camcorders - Depot Repair Warranty

Toshiba America Consumer Products, L.L.C. ("TACP") makes the following limited warranties to original consumers in the United States. THESE LIMITED WARRANTIES EXTEND TO THE ORIGINAL CONSUMER PURCHASER OR ANY PERSON RECEIVING THIS GIGASHOT DIGITAL CAMCORDER AS A GIFT FROM THE ORIGINAL CONSUMER PURCHASER AND TO NO OTHER PURCHASER OR TRANSFEREE.

GIGASHOT DIGITAL CAMCORDERS PURCHASED IN THE U.S.A. AND USED ANYWHERE OUTSIDE OF THE U.S.A., INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO, ARE NOT COVERED BY THESE WARRANTIES.

GIGASHOT DIGITAL CAMCORDERS PURCHASED ANYWHERE OUTSIDE OF THE U.S.A., INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO, AND USED IN THE U.S.A., ARE NOT COVERED BY THESE WARRANTIES.

Limited One (1) Year Warranty on Parts and Labor

TACP warrants this gigashot Digital Camcorder and its parts against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. DURING THIS PERIOD, TACP WILL, AT TACP'S OPTION, REPAIR OR REPLACE A DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU.

Rental Units

The warranty for gigashot Digital Camcorder rental units begins on the date of the first rental or thirty (30) days after the date of shipment to the rental firm, whichever comes first.

Commercial Units

gigashot Digital Camcorders sold and used for commercial purposes have a limited warranty for all parts and labor, which warranty begins on the date of original retail purchase and ends on the date that is ninety (90) days thereafter.

Owner's Manual and Product Registration Card

Read this owner's manual thoroughly before operating this gigashot Digital Camcorder.

Complete and mail the enclosed product registration card or register your gigashot Digital Camcorder online at <u>www.tacp.toshiba.com/service</u> as soon as possible. By registering your gigashot Digital Camcorder you will enable TACP to bring you new products specifically designed to meet your needs and help us to contact you in the unlikely event a safety notification is required under the U.S. Consumer Product Safety Act. Failure to complete and return the product registration card does not diminish your warranty rights.

Your Responsibility

THE ABOVE WARRANTIES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

- (1) You must retain your bill of sale or provide other proof of purchase.
- (2) All warranty servicing of this gigashot Digital Camcorder must be made by the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.
- (3) The warranties from TACP are effective only if this gigashot Digital Camcorder is purchased and operated in the Continental U.S.A. or Puerto Rico.
- (4) Labor service charges for set installation, setup, adjustment of customer controls, and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.

(5) Warranties extend only to defects in materials or workmanship as limited above, and do not extend to any gigashot Digital Camcorder or parts that have been lost or discarded by you or to damage to the gigashot Digital Camcorder or parts caused by fires, misuse, accident, Acts of God (such as lightning or fluctuations in electric power), improper installation, improper maintenance, or use in violation of instructions furnished by TACP; use or malfunction through simultaneous use of this gigashot Digital Camcorder and connected equipment; or to units that have been modified or had the serial number removed, altered, defaced, or rendered illegible.

How to Obtain Warranty Services

If, after following all of the operating instructions in this manual and reviewing the section entitled "Troubleshooting," you find that service is needed:

- (1) For instructions on how to obtain warranty service for your gigashot Digital Camcorder, contact TACP's Consumer Solution Center toll free at 1-800-631-3811.
- (2) You must include the original bill of sale (or a copy thereof) or other proof of purchase along with the entire gigashot Digital Camcorder to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center. You are responsible for all inbound transportation and insurance charges for the gigashot Digital Camcorder to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.

For additional information, visit TACP's website: www.tacp.toshiba.com

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No person, agent, distributor, dealer, or company is authorized to change, modify, or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of TACP arising under the warranty or under any statute or law of the United States or any state thereof is hereby limited to ninety (90) days from the date you discover, or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE IN THE U.S.A. SOME STATES OF THE U.S.A. DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, WHEN AN ACTION MAY BE BROUGHT, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE PROVISIONS MAY NOT APPLY TO YOU UNDER SUCH CIRCUMSTANCES.





TOSHIBA

• gigashot

Application Installer

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O acdsee PowerProducer 3 for TOSHIBA



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